

A Clinical Survey of Fifty Cases of Exophthalmic
Goitre, with Special Reference to the Pathology,
Symptomatology, and Treatment of the Condition.

by

John C. Hodgson

(M.B., Ch.B.)

Case Histories.

M.D
1925



CASE 1.HELEN IRVING aet. 16 Schoolgirl.Langholm.

21:10:25 - 11:1:26.

Residence - Langholm.Water Supply - hard water: led in from hill spring.Heredity - goitre: mother and two relatives.

nervous disease - nil.

Food - always hungry: always thirsty.

takes excess of Carbohydrate.

Previous Therapy - 10 months - Hg. ointment.

6 months - Ext. thyroid sicc.

5 weeks - Iodine (6 months ago).

Previous Infections - nil.Emotional Disturbances - nil.

Sleep- good: no dreams.

Puberty - menstruated once. November 1924.

Onset of Thyroid Symptoms.

December 1924 - Swelling of neck.

February 1925 - exophthalmos.

March 1925 - Palpitation and Tachycardia.

Thyroid Gland.

enlarged: large, diffuse, granular,

pulsatile: extends from cricoid to suprasternal

notch: skin hyperaemic over gland:

thrill present: systolic loud whistling murmur

most marked at upper poles.

no pressure symptoms.

Eyes

exophthalmos /

exophthalmos: slight: bilateral.

conjunctivitis present.

signs. Von Graefe -

Dalrymple+ Stellwag + Moebius- Joffroy+

Pupils - slightly dilated.

Eyelids - slightly pigmented.

Stare is present: it alternates every $\frac{1}{2}$ minute or so with a quick irregular blinking of the eyelids.

Cardio Vascular System.

Tachycardia palpitation dyspnoea.

Pulse - regular in force and time.

Corrigan's pulse: 120 per minute.

Heart - $\frac{III}{114/5}$.

Apex - 5th interspace, 5" from mid line.

strong diffuse.

mitral systolic murmur propagated into axilla, 2nd sound closed.

Loud high pitched Pulmonary systolic.

Blood Pressure - Systolic 150

Diastolic 68

Pulse Pressure 82.

Arteries - pulsating Carotids.

While Capillary pulsation was not observed, the application of the sphygmomanometer was seen to cause numerous haemorrhages in the skin.

Nervous /

Nervous System.

Tremor of hands - fine and quick.

is emotional:

no headaches or vertigo or sleeplessness.

Skin.

fine: moist: warm: hyperaemic: hyperaemia
chiefly present over gland: pigmentation of
eyelids.

Respiratory System.

nil.

Gastro intestinal system.

ravenous appetite: intense thirst: no constipation
or diarrhoea or vomiting.

Urinary System.

Glycosuria varying from 0.06 - 0.25 %
present on 20 occasions during her stay.

Clinical Findings.

Pulse - see chart.

Weight - " "

Basal Metabolic Rate - see chart.

31:10:25	-	55 %
4:11:25	-	40 %
12:11:25	-	23 %
27:11:25	-	17 %

Blood /

Blood Sugar Tolerance Test - 2:12:26

1 - 0.145
 2 - 0.162
 3 - 0.162
 4 - 0.162
 5 - 0.168

Blood Pressure.

	<u>Systolic</u>	<u>Diastolic</u>	<u>Pulse Pressure</u>
initial	158	68	90
final	130	62	68

Treatment.

21:10:25 - Mist Cascar. co.
 8:11:25 - Pot. iod. gr. \bar{T} b.i.d.
 17:11:25 - Insulin units $5 \frac{1}{2}$ hr. t.i.d. a.c.
 28:11:25 - Pot. iod. gr. \bar{T} daily.
 5:12:25 - Pot. iod. stopped.
 12:12:25 - Pot. iod. gr $\frac{1}{4}$ daily.
 28:12:25 - Pot. iod. stopped.
 6: 1:26 - Insulin stopped.
 Radium 480 mg. hrs.

Progress Notes.

The most striking feature in this case is the gain in weight.

A transient auricular fibrillation was present for the six days following the excitement of Xmas Day. The heart is already permanently damaged.

On discharge: the exophthalmos was still present
 the tremor was less
 the /

the stare gone
the pulse slower.

Summary.

Is this case the result of thyroid and iodine overtreatment of an endemic goitre ?

The most striking result was the gain in weight: this was probably due to the fall in Basal Metabolic Rate and it is theoretically possible that insulin helped. The association of glycosuria is interesting: is it a renal glycosuria ?

The presence of hyperglycaemia suggested the use of insulin with great caution. The injection appeared to the observer to be strangely painful: this pain was abolished if sugar was given just before the insulin.

The effect of psychological or external stimuli as shown by the pulse rate is well demonstrated on the accompanying chart. It makes the reading of the action of Pot. Iod on this pulse rate difficult to interpret; though an attempt to show this is seen on Chart 2.

*Why ask + simply
drop the matter?*

Why not discuss it?

JANET SHARPE aet. 30 Teacher.

Aberfeldy.

28:1:26 - 1:4:26.

Residence - Aberfeldy 18 years: Crieff 7 years:
Aberfeldy 3 years.

Water - Aberfeldy soft: Crieff hard.

Heredity - Goitre nil; nervousness nil:

Food - drinks much fluid.

Previous Therapy - Radium for 24 hours 18 months ago.

Infections - Enlarged tonsils: sore throats:
constipation.

Emotional Disturbance - great shock when mother had
to have severe operation suddenly.
rises 6.30 a.m. and after school indulges
in girl guides and amateur opera.

Sleep - poor. excited at bedtime.
dreams and nightmares.

Date of Onset of Thyroid Symptoms.

April 1924 - indigestion: flushings:
palpitation: mother noticed
exophthalmos.

May 1924 - very tired.

September 1924 - Radium for 24 hours:
improved. flushings and pal-
pitation disappeared.

October 1925 - effect began to wear off:
easily tired.

December 1925 - palpitation and flushing.
eyes /

eyes became 'stary' again.
 ceased to feel cold.

Thyroid. - Never was very big.
 went away after Radium.
 returned in November 1925.
 increased at periods.
 also Palpitation on least excitement.
 Dyspnoea on exertion.
 Oedema of ankles at night.
 Hair getting coarse in last 2 years.
 must always be doing something:
 unable to relax.
 sleep bad.
 losing weight.

Assigned cause - Life a continual strain: fright
 at mother's operation.

Thyroid.

enlarged but not markedly so.
 Right side larger than left.
 firm smooth and vascular and granular
 thrill present and systolic murmur loudest at
 upper poles of gland.
 Hyperaemia over neck and upper part of chest.
 Gland increases at menses.
 no pressure symptoms on swallowing, but a sens-
 ation of choking which interferes with her lying
 down at night.

Eyes. /

Eyes.

exophthalmos - not marked: bilateral: greater
on right side than left.

Von Graefe. + Stellwag+ Joffroy -

Dalrymple + Moebius -

Pupils moderately dilated, right more than left.

Pigmentation of eyelids present.

Cardiovascular System.

Tachycardia: palpitation: dyspnoea.

swelling of ankles at night.

Pulse 120. regular in force and time.

Blood Pressure - Systolic 150

Diastolic 70.

Heart $\frac{III}{1/4\frac{1}{2}}$

localised forcible apex.

systolic murmurs in all areas, loudest at the

Pulmonary Area.

No pulsation in vessels of neck.

Nervous System.

vivacious girl with incisive speech.

of more than ordinary intelligence.

not emotional, but very excitable.

tremor of hands present: not marked.

Skin.

medium texture: moist: hyperaemic, especially
over neck and chest.

warm to the touch: nails brittle:

hair /

hair becoming coarser and falling out.

pigmentation of eyelids present.

Respiratory System.

Congested nasopharynx: enlarged tonsils.

Gastro intestinal System.

appetite exceedingly good:

thirst excessive:

constipation.

Urinary System.

2½% sugar present: no acetone.

Clinical Findings.

Glucose Tolerance Test.

0.098 mg. %

0.268

0.195 1.6 gms. % sugar in urine.

0.200

0.139 2.5 " " " " "

Fat in Faeces.

14% of which 50% are split fats.

Weight.

28:1:26 8st. 2½lbs.

1:2:26 8st. 6¼.

22:2:26 8st. 5¼.

8:3:26 8st. 2¼

15:3:26 8st.

29:3:26 8st. 0½lbs.

i.e. the weight tends to fall.

Urine /

Urine.

Glycosuria constantly present.

from 0.2% - 2.5%.

Blood Pressure.

28: 1:26	S. 148	D. 70
8: 2:26	S. 130	D. 60
20: 2:26	S. 126	D. 60
12: 3:26	S. 120	D. 70
27: 3:26	S. 120	D. 70.

Basal Metabolic Rate.

3: 2:26	3%
2: 3:26	4%.

Treatment.

30: 1:26	Tr. card.co. $\eta \bar{V}$ t.i.d.
3: 2:26	Insulin units 5 t.i.d.
5: 2:26	Pot. Iod. gr. $\frac{1}{2}$ daily.
13: 2:26	Insulin stopped.
19: 2:26	" $2\frac{1}{2}$ units b.i.d.
29: 2:26	" 5 " t.i.d.
	Mist. Casc. co. $3\bar{II}$ b.i.d.

Progress Notes.

This case presents the following features:-

(1) no gain in weight.

is this partly due to the glycosuria ?

(2) symptoms of exophthalmic goitre with low Basal Metabolic Rate.

(3) slowing of pulse by Pot. Iod.

(4) /

- (4) continuous glycosuria found.
- (5) nervousness, palpitation and sweating decreased in severity.
- (6) Insulin produced a hypoglycaemia with nervousness, tremors, palpitation and sweating, and was discontinued for a time.

Summary.

The diagnosis here is open to question. Is this true exophthalmic goitre or is it Autonomic Imbalance ?

Patient is of the type who cannot relax and is living at high tension.

Glucose tolerance test is inconclusive, but probably points to renal glycosuria.

Patient exhibits the peculiar mental complex of self-confidence, non-emotionalism, incisive speech, animated appearance coupled with nervous apprehension. On the theory of Plummer this case would be explained by a relatively large amount of abnormal agent and a small excess of thyroxine.

CASE 3.

ADA LANGLEY aet. 27 Weaver.Nelson.

Water - hard protected.
Heredity - goitre nil: nervousness nil.
Personal - nil.
Infections - tonsillitis: sepsis under toe nails.
Emotional disturbance - nil.

Onset of Thyroid Symptoms.

4 years history:

Weakness for 12 months: then in unknown order.
 Palpitation: exophthalmos: nervousness: exophthalmos: and the feeling that the floor was rising and falling in front of her eyes.
 Amenorrhoea 4 months: always feels too warm.

Thyroid: slightly enlarged: equally so: very firm: not specially vascular.

Exophthalmos: marked: bilateral: stare present: pupils not dilated: Von Graefe+: Moebius+: Stellwag+: Joffroy+: Dalrymple+.

Cardiovascular Symptoms.

Pulse 100 per minute: regular time and force:
 Blood Pressure - 140 Systolic 0.90 Diastolic.
 Heart not enlarged: systolic murmurs present:
 Pulmonary systolic marked.

Nervous System.

bright: intelligent: self-confident: incisive speech /

speech: tremors +. sleep good: no dreams:

Skin.

fine: moist: satiny: warm:

leucoderma of neck and chest in patches.

pigmentation of eyelids: sallow face: nails
not brittle.

Gastro intestinal Symptoms.

good appetite: excessive thirst for 5 months:
constipation: no diarrhoea: teeth artificial.

Urine.

acid: sugar present.

Previous treatment.

has had X Rays for 10 months with slight
improvement.

Treatment.

Pot. Iod. gr $\frac{1}{2}$ gr $\frac{1}{4}$: patient still at
work.

Summary.

The usual type of exophthalmic goitre in the
young adult woman: lack of introspection makes good
history impossible: otherwise she is a bright, self
confident and cheerful girl.

The most troublesome symptoms were tachycardia
and palpitation, and the feeling that the floor was
rising up and down in front of her eyes.

The marked stare and tremor suggest that she is

a true case, and she illustrates the fact that X Rays play a limited part in the condition. X Rays reduced the size of the gland, and made it more firm - they did not alleviate her other symptoms. Pot. Iod. did do this - the exophthalmos receded, the stare was lost, and the pulse rate fell and continued in normal limits. (see Chart) She lost the sensation of the ground being now stationary, and in her own words 'felt a new woman'.

CASE 4.

ELSIE LEE, aet. 24. Shop Assistant.35 Edward St., Nelson.Water - hard: led in.Heredity - Goitre and nervousness - nil.Previous Infections - influenza: septic teeth.Emotional disturbance - "something connected with a man, but it was her own fault".

Motor accident seven years ago.

Poor sleep: dreams: talks in sleep.

Menstruation - Twelve weeks Amenorrhoea.

dysmenorrhoea present.

Thyroid Symptoms.

Exophthalmos May 1925.

Goitre " "

Tachycardia & Palpitation May 1925, but got worse Xmas 1925.

Feeling of heat Xmas 1925.

Nervousness " " ,

Thyroid Gland.

enlarged: not very much: symmetrical: firm to the touch.

systolic murmur present, maximal over upper poles of thyroid: thrill and bruit present.

the gland has never been very big.

Exophthalmos.

MARKED: bilateral and equal: stare present.

Von Graefe+, Moebius+, Stellwag+, Dalrymple+.

pupils /

Treatment.

had Radium for 16 months.

Pot. Iod. gr $\frac{1}{7}$. Pot. Iod. gr. $\frac{1}{4}$.

Within one week the exophthalmos had been reduced by $\frac{1}{2}$, and the stare had disappeared.

The pulse fell (see Chart). Patient continued her daily work while under treatment.

Summary.

Case of exophthalmic goitre of emotional onset. Previous treatment by Radium had apparently reduced the size of the gland and made it more firm, but had not had much action on the general symptoms. Pot. Iod. in small doses did wonders: it reduced the exophthalmos, banished the stare, and reduced the pulse rate in a short time. Patient a very true case: very confident and not in the least 'nervous'.

CASE 5.

Mrs. ANN TURNER aet. 55. Housewife .Murton, Sunderland.

8:12:26 - 19:3:27

Residence - Sunderland all her life.Water Supply- hard water from outside tap.Heredity - Goitre - mother.

Nervous Disease - " .

Food - Nothing to excess.

Too little fresh food.

Previous Therapy - nil.Previous Infections - Influenza: Sore Throat(Severe)2 years ago: Pyorrhoea: Gastritis: Constipation:
Measles: Rheumatism.Emotional Disturbances - nervous all her life: of
worrying nature: collapsed in thunder storm
aet. 30 and needed medical attention.Physical Rest - unable to relax: must be doing
something always.

Sleep - bad.

Dreams - unaware that she dreams, but her husband
has sometimes to waken her because she
cries out in her sleep.

Puberty - aet. 17.

Menopause - aet. 48.

Para 3.

operation for Fibroid 15 years ago.

Onset of Thyroid Symptoms.6 - 7 years - periods of "feeling run down".
tremors./

tremors.

flushings.

These passed off.

1 year + - loss of weight.

weakness.

6 - 7 months - severe trembling.

palpitation and tachycardia.

2 months - exophthalmos.

? - goitre - presence unknown till
admission to hospital.

Thyroid Gland.

enlarged, right side more than left.

right side slightly firmer than left.

whole gland is smooth and not tender and is
rather less granular than usual in exophthalmic
goitre.

systolic murmur present, maximum at superior
pole of thyroid.

Eyes.

exophthalmos present and equal.

stare - present.

pupils - not dilated.

signs - Von Graefe. +

Moebius +

Joffroy +

Stellwa~~g~~ +

Dalrymple +

pigmentation/

pigmentation of lids not found.

Cardiovascular System.

tachycardia: palpitation: no pain.

Pulse - regular in force and time: 118 per minute.

Corrigan's pulse.

Heart - $\frac{III}{1/4}$.

Apex - localised and forcible.

in 4th interspace $\frac{1}{2}$ " internal to nipple
line.

Auscultation - Pulmonary Area - loud whistling.

systolic murmur, 2nd sound closed.

other areas - loud snapping 1st sound,
2nd sound closed.

Blood Pressure	Systolic	170
	Diastolic	98
	Pulse Pressure	72.

Nervous System.

Tremor - fine: well marked in hands and tongue.

Restless: not emotional: general nervousness
present: no depression or irritability.

Sleep - poor.

Headaches - common - frontal.

No vertigo.

Fatigue - easily tired.

Skin.

fine texture: warm: moist:

no /

no definite erythema or hyperaemia.

nails are brittle.

She does not like warm weather.

Respiratory System.

negative.

Gastro intestinal System.

appetite not good.

thirst - excessive in last four weeks (on cross examination): abdominal discomfort: heaviness and flatulence in epigastrium with nausea - 10 years' duration.

Constipation - 10 years: no diarrhoea.

Teeth - lower show pyorrhoea.

Hypochlorhydrea present - Free Acid 8

Total Acid 22.

Urinary System.

trace of sugar was found on many occasions.

Sugar Tolerance Test.

specimen fasting - trace sugar.

after 1 hour - ++ "

2 hours - + "

Blood Sugar Curve not done.

Locomotory System.

Increase in carrying angle found.

Clinical Findings.

Pulse - see chart.

Weight /

Weight - on admission 7st. 9 lbs.
 1 week later 7st. 6 lbs.
 on discharge 7st. 11 lbs.

i.e. steady gain of $\frac{1}{2}$ lb per week after the
 initial loss.

Blood Pressure - on admission 170/98.
 1 week later 144/90.
 remained about 142/90.

rose on excitement.

e.g. on going home 178/98.

on seeing post operative case
 with large disfiguring lobe
 left 184/90.

Treatment.

8:12:26 Tr. card. co. \bar{V} b.i.d.
 21:12:26 Pot. Iod. gr $\frac{1}{2}$ b.i.d.
 11:1:27 Acid Hydrochlor. dil. \bar{X} t.i.d. p.c.
 26: 1:27 Pot. Iod. gr $\frac{1}{2}$ daily.

Constipation - Mist. Alb.

Headaches - Sod. Phosph. gr. ~~XXX~~ or
 Caffein gr $\frac{1}{17}$ Phenacetin gr. \bar{V} .

Progress Notes.

The net result of the case is:-

- (1) The pulse rate was brought down from 110 to one
 of less than 80 and kept there.
- (2) The stare disappeared.
- (3) The exophthalmos grew much less but did not
 entirely /

entirely disappear.

- (4) The thyroid became harder and smaller.
- (5) The tremor disappeared.
- (6) The patient put on weight.

Frontal headaches were troublesome and reacted better to Phenacetin and Caffein than to Sod. Phosph.

Summary.

The action of Pot. Iod. is borne out (see chart) Constipation and Hypo acidity would seem to favour the auto intoxication from the bowel theory.

Glycosuria was present and might explain the small gain in weight. Through fear the systolic blood pressure rose from 142 to 184. Is this an adrenal action, and could the same explain the presence of glycosuria ?

Lesser Points.

This woman belonged to the type who cannot relax: she had a mother who was nervous and had a goitre.

Is the collapse in the thunder storm evidence of an unstable sympathetic system ?

CASE 6.

E. LEITCH aet. 19. Domestic Servant.

of Selkirk)
Leith)

18:4:25 - 26:5:25.

Birthplace - Leith for 18 years.

Selkirk for 1 year.

Water - Selkirk hard.

house own supply - mansion house.

Heredity - Goitre: mother goitre since 18.

operated on 10 years ago for
it. mother 42.

Nervous Diseases: mother nervous.

Iodine No previous Iodine Theraphy.

Previous Infections - Whooping Cough.

Nasal Catarrh.

Emotional Disturbance - dates her illness from August

1924 when bitten by a fox-
hound.

Work - very heavy: often 6 a.m. - 10.30 p.m.

$\frac{1}{2}$ day a week: otherwise not out of
doors.

$\frac{1}{2}$ day often used for sleeping.

Sleep - slept very little for last 6 months.

Puberty - started at 16. regular 1/28 days.

3 months Amenorrhoea.

Thyroid Symptoms.

1. Enlarged Thyroid

gradual onset.

first noticed by aunt.

2. /

2. Nervousness and Tremor. Tremor very slight.

On asking -

3. Sweating.
4. Palpitation.
5. Headache.
6. never feels cold.

Own conclusion as to cause of illness -

1. fright of dog bite +.
2. Insomnia.

Obvious Morbid Appearance:

Large Staring Eyes

Frightened Look.

Nourishment Good - has gained weight lately.

Thyroid

bilateral smooth symmetrical soft swelling transversely 4".

Thrill felt by hand.

loud systolic murmur heard over gland.

very vascular.

says it increases in size with excitement.

freely movable under skin.

not cystic.

no dysphagia.

some dyspnoea.

Eyes.

bilateral exophthalmos. equally so. moderate.

bright stare also present.

Von Graefe+: Stellwag+.

Moebius /

Moebius + .

Joffroy -

Dalrymple +

Pupils light reaction +. not dilated:

convergence impaired.

no pigmentation of eyelids.

Cardiovascular System.

Pulse 112 on examination. charted 90 + 100 on chart. regular in force and time.

Heart $\frac{III}{1/3\frac{1}{2}}$.

First sound replaced by a blowing systolic murmur in each area. 2nd sound closed.

Apex beat localised.

thrust very active.

sounds very loud: can be heard at back.

Electrocardiogram. normal.

Blood Pressure 150/108.

Tachycardia and Palpitation.

No pain. no irregularity.

Nervous System.

Tremor seen - slight.

Sleep - good in R. I. E.

not in the last 6 months in service.

Emotion - not abnormal.

Headache - severe frontal occasionally complained of.

Vertigo - not found.

Fatigue /

Fatigue - not now found.

was present in service.

jerks present. abd. ++

spinal reflex present.

Skin.

Of fine texture. moist and hyperaemic and warm. no pigmentation. Joffroy's sign - Old scars on legs from boils aet. 9.

Respiratory System.

dyspnoea present.

nil else.

Gastro Intestinal System.

Appetite - good.

Thirst - not excess.

No vomiting, constipation or diarrhoea, or dyspepsia.

Teeth - upper - bad.

lower - good.

Spleen and Tonsils not enlarged.

Tongue follicles hypertrophied somewhat.

Urine - acid 1021. mucus urates. no abnormal constipation.

Stool - (C15 Diet)

Fat 22.55%.

with 50% fatty acid.

Blood Sugar. 23 ⁴/25 125 mg. %

Glucose /

39.

	124	
4:5:25	126	/50.
7:5:25		/46.
	134	
18:5:25		/42.
	128	
25:5:25		/ 44.

Mist. Casc. co. b.i.d.

Aspirin, Phenacetin, Caffein.

Summary.

This case presents no unusual features: it is the vascular type of the young woman. The cause was fright, accentuated by overwork and poor sleep.

Rest was sufficient to reduce her to a state of tranquility: the pulse rate fell, her nervousness diminished and the heart regained its strength again.

CASE 7.

HELEN STEELE aet. 23. Shop Assistant.North Berwick.

13:7:26 - 6:8:26.

Home is at Belhaven near Dunbar.

Water - tap water - soft.Heredity - Goitre - no relations.Nervous Disease - Mother nervous break
down: Brother started fits at 30.

No Previous Theraphy.

Previous Infections. Measles, tonsillitis frequent-
ly. tonsillectomy 1 month ago.Emotional Disturbance.Fright last September - cat entered bed-
room window in middle of night. Terrified to
stay by herself always has been.

3 days stay alone once.

Work - not too hard. golf: dances to excess.Sleep - bad last summer - bad dreams.getting better. dreams not terrifying:
often pleasant.Puberty - 16 regular ³⁻⁴/28.Thyroid Symptoms.Started to feel nervous about two years ago.
Swelling in neck 1st noticed 13 months ago. Has
not noticed much wrong with her eyes, but thought
they were slightly prominent and occasionally tired
and hot at night.

No palpitation.

Tremor /

Tremor noticed two months ago: less now:

Sweats much)
 Feels too warm) date of onset unknown.

Own conclusions as to cause of illness.

NOT SURE: overdoes things - poor sleep and too
 many dances: always feels too tired.

Obvious Morbid Appearances.

Exophthalmos not excessive though present.

Stare bright glittering - marked.

Sclera shows.

no pigmentation.

intelligent: quick: cheerful.

slight oedema of ankles.

nutrition good.

Thyroid.

pigmented.

Right side more enlarged than left.

Firm homogenous. moves freely not tender.

Thrill.

Says it is bigger when menstruating.

Systolic murmur more marked on right side.

Nervous System.

talks rapidly not at rest.

reactions brisk.

Skin.

Nails becoming very brittle.

Hair /

Hair not coming out.

Moist warm skin: fine and pigmented.

Respiratory.

Voice became slightly husky in last six months.

15 cigs. per day.

Expansion diminished.

Gastro Intestinal.

Appetite very good.

Tongue - clean moist: slight tremor.

Thirst - in excess.

No diarrhoea: no constipation.

Pulsating Aorta.

Eye Signs.

Pigmentation of lids marked.

moderate exophthalmos equal: pupils not

dilated: glassy stare present.

Von Graefe +

Stellwag +

Joffroy +

Moebius +

Cardiovascular System.

Pulse 100: regular in force and time.

no palpitation.

Heart $1 \frac{III}{1 \frac{1}{2}}$

Apex localised and heaving.

systolic murmur at apex.)

systolic murmur at aortic areas) 2nd sound closed

Blood /

Blood Pressure 140/70.

Nervous System.

Slight tremor of hands.

Headaches

Common; frontal: cause unknown.
rather emotional.

Palate and Pharynx.

Chronic inflammation.

Urinary System.

Normal.

Tests.

Wasserman - negative.

Basal metabolic rate - 18.7.25. +38%. 140/76.

31.7.25. +30%. 152/? *What is this?*

7.8.25. + 14%. 140/?

Fat in faeces - total fat 39%,
of which 45.28% were split fats.

Sugar Tolerance Test.

(Sugar negative in urine)

Fasting - 135

After sugar *(How much?)*

$\frac{1}{2}$ hour - 185 mg. per cent.

1 hour 179 " .42 gms.% in urine.

$1\frac{1}{2}$ hour 110 "

2 hours 120 "

Blood/

Blood Pressure.

13/7/25	140 /70.
27/7/25	142 /54.

<u>Weight.</u>	5ft. 5"	<u>Date.</u>
9st. 1 lb.		13: 7:25
8st. 9½ lbs.		20: 7:25
8st. 8¾ lbs.		27: 7:25
8st. 7¼ lbs.		31: 7:25
8st. 10¾ lbs.		3: 8:25

Treatment.

13/7/25 Tr. card. co. η \bar{v} . t.i.d.
 18/7/25 Ac. Sod. Phosph. gr. \bar{XX} , t.i.d.
 Insulin units 5, Glucose 15 gms. t.i.d.
 23/7/25 " " 45 " "
 27/7/25 " " 60 " "
 28/7/25 Pot. Iod. gr \bar{ii} daily.
 got up 31/7/26.

Progress Notes.

Rest in bed resulted in a steady fall in pulse to 80 in 13 days. Fat in faeces show normal pancreas. Sugar Tolerance Test showed that the storage mechanism was not perfect and that the fasting blood sugar was rather high.

Insulin units 5 - sugar 15 gms. to cover.
 Complained of pain at site of injection of insulin.
 This was negatived by increasing the sugar to 45 gms.
 later /

later more pain - more sugar 60 gms. - cure.

Nine days after insulin started, pulse rate started to rise and the temperature was a little varied, and of this Pot. Iod. gr. $\frac{4}{17}$ daily was given.

In last few days gained $3\frac{1}{2}$ lbs.

At discharge felt much better.

Basal Metabolic Rate fell from +30% - +14%
in last few days.

Summary.

Patient presents mild features of exophthalmic goitre of the young adult woman. She was apparently leading an unhygienic life, and the fear of living alone seems to have been her breaking point.

The excessive local reaction following injection of insulin and its cure by the administration of glucose is interesting.

Case 8. Miss Goodall, aet. 39, single. Haddington.

Water - hard, laid in.

Heredity - sister has exophthalmic goitre, Case 9.

Personal - tea to excess.

Infections - tonsillitis aet. 14; septic teeth.

Emotional disturbance - Had a great fright when working as a domestic servant; a burglar shone a flashlight into her bedroom window. She fainted, fell to the floor, and later crawled to another girl's bedroom. Never been the same since.

Rest - Mental and physical.

Relaxation an impossibility; works at least 14 hours per day; bakes and sells; at night her thoughts are wholly concentrated on the next day's work. She has bad dreams: of wild animals chasing her: of black wings flapping round her.

Symptoms - 11 years' duration.

Unable to give them in definite order. Weakness, tiredness: nervous: work became an effort: used to feel ground rising up to meet her: her head went like a sledge-hammer: used to put her forehead against the steel bars of the grate to try to cool it: this intense "headache" lasted for two hours each morning/

morning and then passed off.

She left her situation: had a month's holiday and went back for two months. She suffered from nervousness, palpitation and tachycardia, - her pulse was exceedingly quick: she lost flesh, and the enlargement of the thyroid and the protrusion of the eyes came on so quickly that her own mother did not recognise her.

All this happened within three months. After her return home the exophthalmos got worse and she also had swelling of her legs and feet.

Present condition.

Thyroid - enlarged; the right lobe is more enlarged than the left; very vascular; thrills and bruits present. Bruit loud prolonged is found with maximum intensity over the superior thyroid vessels at the upper poles of the thyroid.

Exophthalmos very marked: equal on both sides:
Dalrymple and Moebius and von Graefe +
Stellway and Joffroy +
Pigmentation of eyelids present.

Cardio-vascular System.

The pulse is over 200 per minute and is irregular, both in time and force; after several minutes of apparently auricular fibrillation, there is a rise of a regular pulse with something like extra/

extra-systoles thrown in.

Heart - Mitral and pulmonary systolic murmurs present. Mitral incompetence found.

Blood pressure ? 102/80

Nervous System.

Tremors +++

Headaches present: chiefly occipital. Animated very intelligent girl: incisive speech: keen, self-reliant.

Integumentary System.

Skin smooth, warm, hyperaemic, moist. Nails very bad - striated and scooped: very brittle: the flesh has separated from the nail up to half way down, and patient states that this improves as she feels better, and gets worse as her condition deteriorates.

Gastro-intestinal System.

Excessive thirst: voracious appetite: intractible diarrhoea lasting 3-4 days at a time, and at its worst occurring when the menses should occur. Glycosuria.

Generative System.

Amenorrhoea 1917-18 for 18 months, since then irregular scanty menstruation.

Treatment - Radium 1919 with temporary improvement: back at her work two months later.

Creosote.

X-rays/

X-rays - three applications at 3 weekly intervals for many months: still having X-ray treatment.

Summary.

A very bad case of exophthalmic goitre, nervous in origin.

Patient is intelligent, interested in her condition. Cannot be idle for an instant: presenting the full picture of the nail condition: showing a much damaged heart whose function is still wonderfully good. Diarrhoea present and interesting because of its time of occurrence - worst when the menses are due. Amenorrhoea followed by scanty irregular menstruation.

The prognosis is very poor in this case.

Case 9. Mrs Tiffney, aet. 45. War widow.
Haddington.

Water - hard, led into house..

Heredity - goitre ; sister has exophthalmic goitre
(Case 8)
nervous disease - nil.

Personal - nil.

Infections - Scarlet fever, measles, flue, rheumatism.

Emotional Shock - husband killed 1918; mother died
six months later; nervous disposition: sleep bad:
no dreams: unable to take rest - cannot sit still:
mania for work.

Onset of Symptoms.

Sept. '26, 12 months ago - on holiday - tachycardia
palpitation
weak shaky feeling.

Oct. '26 , enlarged thyroid.

Feb. '27, exophthalmos.

Thyroid. Smooth, not hard: not granular:
right side larger than the left. No bruits.

Exophthalmos - slight: bilaterally symmetrical:
pupils slightly dilated and equal.

von Graefe - : Moebius - : Stellway - : Dalrymple +
Joffroy +.

Cardio-vascular System. Pulse 72
Blood pressure 136/70
Heart - nil to note

Skin - moist, clammy, sweat, fine.

Alimentary/

Alimentary System - increased appetite.
increased thirst.

As a rule somewhat constipated with uncontrollable diarrhoea at times lasting a fortnight.

Weight - 1 year ago - 13 st. 4 lbs.

8 weeks ago - 9 st. 2 lbs. and was then gaining.

Nervous System - headaches: giddiness. no tremor.

Nails - ashamed of them. Dirty; flesh receded from nails and they were dirty up to half way down. When she started to improve, it began to grow up again.

Treatment - rest in bed

X-rays once weekly.

Result - very much improved.

Summary - a mild case of the disease; might have undergone cure with rest alone without X-rays:
cause - possibly nervous.

Her sister is a very bad case of exophthalmic goitre: shows the typical type of diarrhoea which is found in the condition and presents the full clinical picture of the nails.

Case 10. Mrs Nellie Anderson, aet. 50. Gorgie.

7/9/25 to 20/10/26.

- nervousness: swelling in neck.

Birthplace - Hawick, 34 years. Hard water - main

Ireland, 7 years ? main

Edinburgh, 9 years Usual - main

Heredity - goitre, nil.

nervousness - 1 sister very nervous.

Personal History - Para. 5.

1921-24 - husband out of work: trying times.

Food - not excess; rather too little.

Water in abundance

No fruit

No previous iodine therapy.

Previous Infections -

Typhoid: T.B. glands in neck aet. 18: carious
teeth 2 years ago: coryza: Frequency of Micturition
2 years.

Onset of Thyroid Symptoms

3 weeks ago - first noticed swelling in neck,

tremor - when excited or worried.

August 1924 - one month in bed - "done up".

Four/

4 years ago - previously quite well: now tired and useless: fainted: palpitation on least exertion. Appetite still good. Sweated easily, does not feel cold; feels warmth to excess. "Flushings" now gone.

Lately much thirst.

one month - Noticed lump in throat herself.

Own conclusions.

Illness due to excessive strain and anxiety of the last four years.

Emotional Disturbances:

No accident or fright:

never rests: always doing something.

Husband and two sons out of work for 2⁹/₁₂ years, and serious illness at home and no money.

Naturally of a worrying nature.

Relaxation - Cannot sit and do nothing: sleeps very badly: dreams only on occasions: has shouted out with nightmare.

Puberty - aet. 14.

Menopause - 4 years ago; since when she dates all her troubles.

Obvious/

Obvious Morbid Appearances -

Pale, tired-looking woman;
swelling and pulsation of neck.
old T.B. glands neck scars.

Slightly yellow conjunctivae: increased carrying
sight.

Thyroid.

Obviously enlarged: isthmus and both lobes.
Smooth granular firm thyroid;
Marked thrill over left lobe:
Soft systolic murmur over left lobe, less so
over right.

No hyperaemia.

history of variation of size.

Eyes.

No exophthalmos.
von Graefe -
Stellwag -
Moebius +
Joffroy +

Pigmentation of eyelids ++

Some lateral mys / especially to left.

Cardio-vascular System.

Pulse 120, regular.
B.P. S. 138;D. 60;P.P.78

Heart

$\frac{III}{1 \quad 4\frac{1}{4}}$ in 6th interspace.

Apex beat forcible and visible.
Aorta pulsate X
Carotids "
Systolic murmurs all over.

Nervous System.

Intelligence - average: excitable: easily
fatigued, mentally and physically.

Well marked tremor of fingers.

Skin - coarse texture except on hands:
moist, warm.
Much pigmentation on face, arms, neck:
Nails not brittle.

Respiratory - T.B. R. apex healed.

Pharynx congested:
Weak toneless voice.
Tonsils congested, not hypertrophied.

Alimentary System.

Normal.
Blood Wasserman - negative.

Glucose Tolerance.

No sugar lost after 50 grams glucose.

Progress Notes.

Cough developed shortly after admission. Mist.
Brompton, also camph. co. cured in 10 days.

Within one week B.P. fell from 138/60 118/52
Within two weeks " " to 108/52.

Patient did not gain weight in Royal Infirmary,
Edinburgh. She was an unsatisfactory patient,
fretting over small things and causing her pulse to
flutter about.

did it?

Left Royal Infirmary, Edinburgh, of her own wish.

Basal metabolic rate - 10/9/25 = + 60% 136/72.

Treatment.

8/9/25. Tr. card. co. $\eta \bar{x}$ t.i.d.
9/9/25. Mist. Brompton.
11/9/25 Tr. camph. co. $\eta \bar{x} \bar{x}$ t.i.d.
Mist. Casc. Co.
17/9/25. Stop Tr. Camph. Co.
21/9/25. Syr. Ferri Iodid. $\eta \bar{x}$ t.i.d.
28/9/25. Stop " " "
Aspirin, Phenacetin, Caffeine.

Blood/

Blood Pressure.

8/9/25. 138/60.

14/9/25. 118/52.

18/9/25. 108/52.

Urinary Examination - negative.

Summary.

An example of exophthalmic goitre in the older type of patient where nervous phenomena predominate, and vascular symptoms have a lesser role. Probably nervous in origin. Patient was slightly wilful; was going home one hour, staying in hospital the next; she eventually left hospital very suddenly without giving notice of her intention.

The psychological effect on the pulse rate is seen on the chart.

Further?

Case 11. M. Stevens, single, aet. 47. Shop
Edinburgh.

17/3/26 to 29/5/26.

Abode - Edinburgh except Norway 1 year (1900).

Water - Edinburgh.
Norway, very hard from tap.

Heredity - Goitre - nil.
Nervous trouble - nil.

Personal history - nothing to note.

Previous Iodine Therapy.

Pot. Iod. gr. iii t.i.d. for a long time.

Previous Infections.

Typhoid, aet. 11.
Sciatica 4 years ago, cured by
Teeth - T. removed 14 years ago, bad.
Pyorrhoea and carious teeth - lower jaw.
Pharynx and tonsils congested and enlarged
No rheumatic history.
Constipation slight.
Genito-urinary - kidney trouble 2 years ago.
loss of strength and loss of weight.

Emotional Disturbances.

Work - buyer in drapery goods and shop superintendent, 18 years, and always felt it a strain. Lately felt it much more so. Since kidney trouble two years ago, much too big a strain.

Nervous breakdown - 13 years ago.

Increasing nervousness - sciatica 4 years ago: painful injections of Phylacogen made her still more nervous.

Rest - 14 days' holiday: quiet off work.

Sleep/

Sleep - bad till 2 years ago: better of late: after stocktaking could not sleep for seeing figures before her eyes.

Home Worry - Much home worry lately: brother drowned 2 months ago. (Her own doctor emphasises this.)

Puberty - aet. 11.
irregular periods now.

Onset of Thyroid Symptoms.

4 years at least ago - thinks small nodule in neck.

2 years ago - suddenly lost weight.
became tired.

Palpitation and dyspnoea: no oedema.
Doctor found albuminuria then and treated her.

October 1925. Had to give up work - done.
Breathless and palpitation very bad.
Pot. iod. gr. iii. t.i.d. till Feb. 1925.

February 1926. Went back to work for 1 month; had to give up again; came to Royal Infirmary, Edinburgh.

October 1926. Swelling in neck has got progressively larger since then but the nodule in the isthmus, she thinks, has not.

For years - felt warm in coldest weather: does not perspire much. Hair getting dryer - not falling out.

Vomited for last three mornings - never before.

Diarrhoea - from time to time: cleared up itself; lasted 2-3 days: blamed taking cold milk. Not been getting very thin of late.

2 years - exophthalmos. Noticed by family: eyes have felt strained.

No pressure symptoms.

Assigned cause - excessive strain.

Thyroid/

Thyroid Gland.

Enlarged as a whole.
 Right lobe increased more than left slightly.
 Whole firmer and granular and hard.
 Nodule in isthmus size of marble.
 No tenderness: no immobility.
 Thrill best felt, right upper pole.
 Systolic murmur do.

Pulsation of Carotids.

Erythema over whole blush area: been increasing since last October.

No periodic variation in size.

Eyes.

Exophthalmos - bilateral - left sight larger than right. Left pupil larger than right: both pupils dilated.

Von Graefe +
 Stellway +
 Moebius slight
 Joffroy +
 Dalrymple -

Slight pigmentation round eyes.

Cardio-vascular System.

Dyspnoea: palpitation: swelling of feet and lack of energy.

Pulse regular, 110: good volume.

Blood Pressure S/O = 135/74.

Pulse Pressure = 61.

Apex beat - localised, forcible, not marked.
 5th interspace just external to nipple.

III
 $\frac{14}{5}$

Mitral systolic → axilla.
 Localised systolics elsewhere.
 2nd sounds closed.
 Pulsating aorta and carotids.

Nervous/

Nervous System.

Intelligence good: not emotional or excitable.
very nervous.

Myopic - right pupil smaller than left.
Exophthalmos - more marked on left side.

Fine tremor in hands
Coarser tremor in tongue.

Jerks not brisk to excess.
Synovitis right knee joint.

Alimentary System.

Appetite good; not drinking to excess but
more than previously.

Diarrhoea - on occasion.
Constipation on occasion.

Teeth - upper removed 15 years ago.
lower bad, carious and pyorrhoea.

McBurney

Respiratory - nil.

Urinary - acid

Integumentary System .

Warm: not specially moist.
Erythema face, neck and upper part of chest.
Pigmentation - some of neck and face.
Hair, dry, not falling out.
Nails, brittle.

ProgressNotes.

Wasserman - negative

Basal metabolic rate -	27/3/26 -	65%	160/130
	23/4/26 -	31%	130/104

17/3/26. Pulse/

- 17.3.26. Pulse 120; B.P. 136/76.
 27.3.26. B.M.R. +65.
 Pot. Iod. gr. \dagger t.i.d.
 31.3.26. Pulse now 90.
 6.4.26. Pot. Iod. gr. \dagger daily.
 Pulse gradually fell to 78.
 10.4.26. Sickness and diarrhoea.
 Pulse up to 104, but fell to 80 after a
 few days.
 26.4.26. Pot. Iod. $\frac{1}{4}$ daily.
 Insulin units 5 t.i.d. to increase weight.
 Wt. 8 st. 13 $\frac{3}{4}$ lbs.
 28.4.26 Wt. 9 st. 4 lbs. B.M.R. + 31%
 2.5.26. Digitalis \bar{X} t.i.d. Pulse \rightarrow 80.
 Excellent health, no tremor.
 27.5.26. Radium 240 mgms. to right lobe.
 29.5.26. Discharged, very much improved.

Has had albumen present only on 1 day
 during her stay in Royal Infirmary,
 Edinburgh.

Reported 28/7/26.

Exophthalmos, von Graefe, Stellway, tremor
 and tachycardia, all negative.
 Heart no murmurs.
 Thyroid smaller and pulsation reduced.

Reported 28/7/26.

Wt. 9 st. 1 $\frac{1}{4}$ lbs. B.P. 162/84.

Came in 2/8/26. Pulse 85.
 Radium 480 mg. hours.

Treatment.

- 19.3.26. Tr Card.Co. t.i.d.
 24.3.26. Sedobrol.
 27.3.26. Pot. Iod. gr. \dagger t.i.d.
 6.4.26. Pot. Iod. gr. \dagger daily.
 11.4.26. Pot. Iod. gr. $\frac{1}{2}$ daily.
 13.4.26. Rhubarb Bismuth and soda powder, t.i.d. a.c.
 19.4.26. Insulin units 5 t.i.d. a.c.
 26.4.26. Pot. Iod. gr. $\frac{1}{4}$ t.i.d.
 2.5.26. Digit. t.i.d.
 7.5.26. Insulin 2.5 units t.i.d. $\frac{1}{2}$ hr. a.c.

4 hourly gargles.

Summary/



Summary.

The effect of iodine on the pulse rate is seen on the chart. Insulin was given in this case and the weight increased greatly. A gain of $4\frac{1}{4}$ lbs. one week, and 4 lbs. the next followed its administration; it is possible that this gain was in part due to the insulin.

The case probably followed excessive strain. A very unusual feature was that the left pupil was larger than the right, though the right lobe of the thyroid was the larger. Diarrhoea was a symptom in this case. She responded to iodine quite well, and benefited by her treatment. She continued to do satisfactorily and radium was tried.

Case 12. Mrs Jane Smith, aet. 30.
Falkirk. 19/2/26 to 13/4/26.

Born - Bathgate.

Abode - Bathgate, 23 years
Falkirk, 6 years

Water - hard, laid into house.

Heredity - Goitre, sister exophthalmic goitre.
Nervousness, father's people nervous.

Para 2. aet. $6\frac{3}{4}$ and $2\frac{1}{4}$

Personal - nil. Vegetables and salads not enough.

Previous Therapy - Radium, 8-9 years ago.
X-rays, 1 year ago.
Iodine painted on at first.
Bottles for heart trouble.

Previous Infections

Measles, influenza, rheumatism.
Teeth - carious teeth at back; hypertrophied
gums; pus sockets of teeth.
Sore throat occasionally with swelling of
glands of neck.

Emotional Disturbances.

No worries or mental strain. Is inclined to
overwork, but not been so fit lately.

Sleep - very badly from time to time. No dreams.

Puberty - 16. Fairly regular periods.
Amenorrhoea for 8 months.

Lactation - nursed first child for 13 months.

Onset of Thyroid Symptoms.

Swelling in neck, 9 years ago.
1 year later went to doctor - painted iodine on.
bottle
1 week after doctor sent her to R.I.E. for radium.

Breathlessness/

Breathlessness and palpitation, 9 years ago,
which radium alleviated but did not cure.

2 years ago, 3 months after birth of second
child, menstruation recurred and she had
menorrhagia: run down: went to doctor:
bed for 12 weeks.

Palpitation and dyspnoea.
Cardiac cycle 160-180 she says.

Swelling of feet but not abdomen.

1 year ago X-rays.

Summer 1925 - another heart attack.
Dyspnoea and palpitation and Ascites.

October 1925 - Falkirk Infirmary for 11 weeks,
and has only been out 5 weeks.
Jaundice, slight, present then.

Last three weeks - marked swelling of abdomen.
more dyspnoea, palpitation,
swelling of feet.
Jaundice present (she has not
noticed)
Nervous and shaky on excitement.
Appetite poor.
No cough.
Swelling in neck comes and goes.
She herself noticed that she will have a bad
attack which will grow less.
Perspires much.
Always very warm.
Amenorrhoea for 8 months.

Thyroid Gland.

Enlarged but not markedly so. Whole enlarged.
Firm and granular, smooth, not tender,
localised nodule, walnut in size, in isthmus.
No thrill or murmur.
Pulsation from carotids.
Noticed periodic variation in size.
Dyspnoea, no dysphagia.

Eyes.

Bilateral exophthalmos; symmetrical.
Von Graefe + Dalrymple +
Moebius -
Stellway +
Joffroy +
Pigmentation of eyelids.
Pupils not dilated.

Cardio-vascular

Dyspnoea, palpitation, giddiness, fainting.
Oedema of feet. Ascites.

Pulse irregular in time and force. 140.

Heart - apex beat is diffuse. 5th and 6th
intercostal space to 2" beyond nipple line.
Marked epigastric pulsation heart
Carotid and venous pulsation in neck aorta

$$\frac{\text{III}}{2 \quad | \quad 6}$$

Apex diffuse and forcible. Systolic thrill present.
Mitral systolic and diastolic, systolic propagated.
Aortic systolic blowing.
Pulmonary systolic 2nd ++
Triemptied "

Nervous System.

Intelligence average, excitable, poor sleeper,
headaches, giddiness, unable for slightest
exertion.
Fine tremor in hands.

Skin.

Medium texture, warm, little hyperaemia.
Pigmentation of face and neck.
Complains of brittle nails.
Slight conjunctival

Alimentary System.

Appetite poor at present.
Occasional vomiting.
Teeth - artificial top; few bottom, very carious,
pyorrhoea ++
Pharynx, congested.
Tongue, clean and moist.
Abdomen - free fluid
Liver not increased.

Urinary - trace bile and albumen.

Basal metabolic rate -
3.3.26. + 21% 168/88.
22.3.26. + 12% 168/96.

Wasserman - negative.

Urine/

Urine -

20/2/26, 21/2/26. - trace of albumen, trace of bile.
 22/2/26 - nil.
 12/3/26, 21/3/26, trace of albumen.

Treatment.

19.2.26. Digitalis η $\overline{\text{xxx}}$.
 " " $\overline{\text{x}}$ t.i.d.
 20.2.26. Mist. Cascar. Co. $3\overline{\text{ii}}$ t.i.d.
 3.3.26. Pot. Iod. gr. $\overline{\text{i}}$ t.i.d.
 6.3.26. stop Pot. Iod.
 9.3.26. Pot. Iod. gr. $\overline{\text{i}}$ t.i.d.
 10.3.26
 to Glucose
 13.3.26.
 11.3.26. Teeth extracted.
 29.3.26. Pot. Iod. gr. $\frac{1}{2}$ b.i.d.
 1.4.26. Pot. Iod. gr. $\frac{1}{4}$ b.i.d.

Weight -	6st. 13	lbs.	3.3.26.
	7st. 3	lbs.	29.3.26.
	7 st. 6	lbs.	5.4.26.
	7 st. 10	lbs.	14.4.26.

Summary.

A chronic case of many years' duration; radium tried 9 years ago, and produced a temporary improvement; X-rays also tried 1 year ago with same result. When admitted had profound cardiac failure with ascites and jaundice. Septic neck and tonsils the only etiological factors found. She improved greatly with cardiac tonics and iodine; her weight on admission with ascites was 6 st. $13\frac{1}{2}$ lbs. without ascites she was 6 st. $10\frac{1}{4}$ lbs. and on discharge she was 7 st. $10\frac{3}{4}$, which was very satisfactory. On admission the orthopnoeic position was necessary - she walked out.

Case 13. Margaret Balingall, aet. 28, single.
Edinburgh. Telephonist.

25.3.26 to 5.6.26.

Residence - Edinburgh all her life.

Water supply - Edinburgh.

Heredity - goitre, mother had goitre.
nervous disease - nil.

Previous iodine therapy - nil.

Previous Infections

Measles,
Whooping cough and mumps, aet. 2 and 4.
Teeth - upper set removed aet 20., very bad.
Lower teeth - some removed later, very
bad; carious teeth only left.

Emotional Disturbances

No severe frights or shocks.
Father's death (Sept. 1924) upset her.
At end of last year, very trying work: had
to go into country; work 8 a.m. to 9 p.m.
with 1½ hours off; found it very exhausting.

Relaxation - picture house once weekly.

Sleep - 8 hours: no dreams; slept badly about
5 weeks ago for 1 week, cannot suggest a cause.

Puberty - aet. 15. Regular, painless.

Onset of Thyroid Symptoms.

5 weeks ago - tiredness, went to doctor. He sent
her to bed; saw neck swelling and
sent her to Royal Infirmary, Edinburgh.

4½ years ago - palpitation, nil else.

6 weeks ago - breathless on exertion.

5 weeks ago - feet swollen at night; only happens
if going about much.

Lately - hair has been falling out.

Sweating not excessive, small of back and feet.

A little more nervous of late.

Assumed/

Assumed Cause of Illness.

Harrassing work in December last, and travelling in buses - exhausting.

Thyroid.

Enlarged, right slightly more than left.
Firm, granular thyroid, not cystic or tender.
Systolic murmur in gland.
No adhesions, no choking, no dysphagia.
Carotid vessels very pulsating.

Slight erythema of right side of neck, going down to chest.

Eyes - no exophthalmos.

von Graefe, absent.

Moebius - absent.

Pigmentation of eyelids, face.

Cardio-vascular.

Pulse 120, regular in time and force.

B.P. 175/80. P.P. 95.

Apex $\frac{3}{4}$ " external to nipple line.

diffuse: 6th interspace.

Mitral systolic propagated into axilla.

Loud aortic and pulmonary systolics.

2nd sounds closed.

Heart - III

I | 5 $\frac{1}{2}$

Skin.

Moist, fine texture.

Hyperaemia over right side of thyroid and neck.

Pigmentation of face.

Hair, falling out lately.

Nervous System.

Fine tremor of hands and of tongue.

Easily tired.

Respiratory and Gastro-intestinal systems.

Nil to note except pyorrhoea present
pharynx and tonsils congested.
tongue tremulous.

Urinary/

Urinary System.

Nil to note. Acid, 1024.

Basal Metabolic Rate.

30.3.26. + 22.
 23.4.26. + 34.
 25.5.26. - 3%

Weight 5 st. 6 lbs.

7 st. 12½ lbs.	25.3.26.
7 st. 13¼	29.3.26.
8 st. 1½	5.4.26.
8 st. 5 lbs.	14.4.26.
8 st. 11 lbs.	19.4.26.
9 st. 0½	26.4.26.
9 st. 5½	3.5.26.
9 st. 6½	10.5.26.
9 st. 8¾	17.5.26.
9 st. 3½	24.5.26.
9 st. 3½	3.5.26.
9 st. 2	6.6.26.

Blood Pressure.

27/3/26. 170/90.
 31/3/26. 124/80.
 13/4/26. 140/74.
 4/5/26. 150/70.
 12/5/26. 160/70.

Treatment.

25/3/26. Tr. Card. Co.
 1/4/26. Pot. Iod. gr. $\frac{1}{7}$ t.i.d.
 6/4/26. do. $\frac{1}{7}$ daily.
 9/4/26. do. gr. $\frac{1}{2}$ daily.
 24/4/26. do. gr. $\frac{1}{7}$ t.i.d.
 2/5/26. do. gr. $\frac{1}{4}$ t.i.d.
 4/5/26. Tr. digitalis \bar{X} t.i.d.
 14/5/26. stop Pot. Iod.
 20/5/26. Apocodine gr. $\frac{1}{4}$ t.i.d.
 21/5/26. Sod. Bicarb. gr. \bar{XV} t.i.d.
 Bismuth Carb. gr. \bar{X} t.i.d.
 21/5/26. Quinin. hydrochlor. gr. \bar{iii} t.i.d.
 stop digitalis.
 20/5/26. Strychnine $\frac{1}{60}$ gr. 4 hourly.
 29/5/26. stop strychnine
 2/6/26. Radium 240 mg. hrs.

Progress/

Progress Notes.

- 25.3.26. Very excitable. 120 p.m. B.P. 170/90.
 1. 4.26. Pot. Iod. gr. $\dot{7}$ t.i.d. given. Commenced when pulse rate fell in a few days time to 110-20 per minute.
- 24.4.26. Complained suddenly of severe palpitation. Heart quicker and irregular. Basal metabolic rate = +34%. Pulse fell and patient remained well till
- 20.5.26 She became sick, vomited green material night and day and pulse and temperature rose. Sod. Bic. and bismuth cured this.
- 25.5.26. Allowed up; continued to keep well. Basal metabolic rate = -3.
- 2.6.26. Radium, 240 mg. hours.
- 5.6.26. Discharged; felt much better.

Readmitted 17.8.26 to 20.8.26.

for radium, could not be got: to come in later.

Basal metabolic rate = + 51% 146/92.
 B.P. 154/76.
 Weight 9 st. 1 lb.

Patient states health very good.

Readmitted 17.9.26.

Radium 480 mg. hours.	118/94.	} Pulse
Weight 9 st. 1 lbs.	104/124.	
B.P. 150/70	102/122.	
Pulse 90/122.		

Summary

This case occurred in a telephonist whose mother had goitre. Patient had a very trying day's work, while the case was recent -of about 6 weeks duration, according to history. The heart was much enlarged.

This/

This may have been a rheumatic effect. Tremor was pronounced; patient's gain in weight was remarkable; after a bout of sickness she lost weight which she did not regain in hospital. Potassium Iodide caused the usual drop in the pulse. After discharge she reported again, and her condition was found to be satisfactory.

Case 14. Agnes Smith, aet. 37, single,
St Leonard's Lodge,
Lasswade, Housework.

24.6.25 to 18.8.25.

Residence - Born Bonnyrigg, 5 years stay.
Lasswade since then.

Water supply - Lasswade, private well for house,
and several others. Good hard water,
not town supply.

Heredity - nil re goitre.
no nervous disorders.

Previous Infections -

She has always been "delicate", doctor never
out of the house when a child. Mumps. Colds.
"Sore throats" - a cold usually starts as a
sore throat.
Pleurisy when at school.
Teeth - removed 7 years ago, not very bad.
Constipated all her life.

Emotional disturbances -

Nil, no worries. Dreams a great deal; not bad
dreams; never remembers what she dreams about.

Sleep - bad from December 1923 until December 1924,
can give no reason.

Life - plenty of time for relaxation.

Puberty - aet. 14 $\frac{1}{2}$. 5-6/28 regular.

Onset of Thyroid Symptoms.

In December 1923 went to doctor for palpitation
sleeplessness
weakness.

She has felt tired and weak for 4-5 years, but
appetite good and no pain, did not go to doctor.
Never noticed neck swollen. Never diarrhoea.
Heart's violent action first noticed 2 years ago.

Own/

Own conclusions as to cause of illness.

Very much "run down" - cause unknown.
 Enlarged thyroid not noticed till her doctor told her.

Obvious Morbid Appearances.

Palpebral fissure wider than N
 Bright glitter in eyes.
 Patient's skin rather brown in colour.
 No obvious swelling in neck.
 Patient bright and intelligent, thin, slight build.

Thyroid.

No enlargement.
 Skin red over neck and upper part of sternum.
 No tenderness.
 Firm not hard thyroid
 Nil on auscultation

Periodic swelling of thyroid she has noticed only lasts a few days - its onset is premenstrual.

Cardio-vascular,

Pulse 75 regular in time and force.
 Palpitation very marked; when tired she can feel pulsation in legs and fingers.
 No praecordial pain but "weak feeling" at times.
 Palpitation - inside nipple line in 5th space regular forcible action.
 Mitral systolic poorly propagated, 2nd sound +
 Aortic and pulmonary - short systolic, 2nd sound closed.

Percussion $\frac{III}{1-4\frac{1}{2}}$

Pulse 80 regular, soft. wall not palpable.
 B.P. 120/75. P.P. 45.
 Abdominal aorta not pulsatile.

Eyes

Palpebral fissure wide, always had "wide staring eyes".
 Eyes bright and glittering.
 Pigmentation round orbit.
 von Graefe +
 Convergence poor, other signs negative.

Nervous/

Nervous System.

Tremor of hands, slight, fine.
 Fatigue, increase marked.
 No excessive emotion.

Skin.

Moist and warm.
 No excessive perspiration.
 Some pigmentation, general.
 Hair, been coming out.
 Nails, becoming brittle, white spots on them.

Respiratory. -nil. Septic tonsils.
 injected uvula: injected pharynx.

Gastro-intestinal.

Appetite very good.
 Abdomen - viscerotonic

Urine - 1020 ac. nil.

Wasserman - negative.

Electrocardiogram - normal.
 fair amount of somatic tremor.

Glucose Tolerance Test.

Time	Sugar.	
	Blood	Urine
0	120	-
$\frac{1}{2}$	239	+
1	295	++
$1\frac{1}{2}$	351	Amount passed in 580 cc. urine = 5 gms.
2	232	

Fasting level high; rises very high fairly gradually and is still above renal threshold at end of 2 hours. 5-4 grams were excreted in this time, 50 grams were given.

Basal Metabolic Rate.

29.6.25	-1%	132/76.
7.7.25.	-5%	130/75.
14.7.25.	+7%	130/75.
21/7.25.	-5%	120/72.
5.8.25.	+2%	115/65.

Stool/

Stool.

28%fat after 3 days C.15 diet. rather high.

Progress Notes.

On account of disturbed C.H. metabolism, insulin was given - 10 units per day \rightarrow 20 units soon. Stopped at end of week. 2 grs. Pot. Iod. daily for another week.

Weight 7 st. steadily but pulse rate did not fall.

Sat up at end of 5th week, and 20 days later, 15 units insulin were given and again stopped after a week.
10 days with treatment, with convalescence at home.

Gained 1 stone in weight.

Reported 1.9.25.

Has had sore throat; feels well. P.98. B.P.116/76.
No congestion of throat; gained $\frac{1}{4}$ lbs.
Discharged, to report later.
Weight with clothes 8 st. $2\frac{1}{2}$ lbs.

29.9.25. Reported. Wt. 7 st. $12\frac{1}{2}$ lbs.
B.P. 126/66.

Pulse rate = 88 per minute.

Blood Pressure

25.6.26. 120/76
11.9.26. 118/68
21.7.26. 110/68.
11.8.26. 110/60.

————— Height 5' $0\frac{1}{2}$ "

Weight

24.6.25	6 st. $12\frac{1}{2}$ lbs.	27.7.25.	7 st. $8\frac{3}{4}$ lbs.
28.6.25.	6 st. $12\frac{1}{2}$ lbs.	31.7.25.	7 st. $10\frac{1}{4}$ lbs.
6.7.25.	7 st. $2\frac{1}{2}$ lbs.	6.8.25.	7 st. $11\frac{3}{4}$ lbs.
13.7.25.	7 st. $6\frac{3}{4}$ lbs.	17.8.25.	7 st. $13\frac{3}{4}$ lbs.

Treatment/

Treatment.

Mist. Cascara Co. b.i.d.
 4.7.25. insulin 5 units b.i.d.
 6.7.25. 10 "
 13.7.25. insulin stopped
 17.7.25. Pot. Iod. gr. $\bar{7}$ b.i.d.
 23.7.25. Stop Pot. Iod.
 31.7.25. Insulin 5 units b.i.d.
 6.8. 25. Stop insulin.

Summary

This is a case of mild dysthyroidism; it might even be considered autonomic unbalance. Glycosuria was present, and the glucose tolerance test showed the typical curve of hyperthyroidism. Insulin was tried - in two months patient gained a stone in weight. The etiology merely shows sepsis. Patient did extremely well.

Case 15. Margaret Crawford, aet. 49, single.
Edinburgh. Domestic servant.

19.8.25 to 21.8.25.

Complained of nervousness - many years.
weakness, about 2 months.

Treated by Dr Eason in Leith Hospital 9 years ago for exophthalmic goitre. Was 6 months in bed and increased in weight. Then went to Edmonton, Canada - partial thyroidectomy.

After her return from Canada, she became much more self-conscious. Imagined people to be talking about her. Even made accusations against entire strangers. Had frequent emotional outbursts. Lost many situations through this.

1.8.25. Got situation with Edinburgh family.
Went to Ballater on holiday.

17.8.25. Had severe outburst. Said everyone in place laughed at her, because she was nervous.
Brought to Royal Infirmary, Edinburgh.

Family history - no goitre.
no nervous disturbances.

Previous history - unreliable.

On Examination - small woman; nourishment good.
exophthalmos marked.
is hardly able to stand.

Thyroid - not enlarged, only just palpable.
visible pulsation in carotids.
scar of operation above sternum.
slight bruit over right lobe.

Eyes - exophthalmos marked.
stare present.
von Graefe +
Stellwag +
Moebius +
Joffroy +

Tremor - not marked; but present

Cardio/

Cardio-vascular System.

Pulse 120
 Blood pressure 160/68 P.P. 92.

Heart - apex beat in 5th space 4" out.

$$\begin{array}{r} \text{III} \\ \hline 1 \quad 4 \end{array}$$

sounds closed in mitral.
 soft systolic elsewhere.

Nervous System.

Intelligence, fair.
 Memory, deficient.

Patient is very emotional, inclined to be excessively affectionate, always declaring that such and such an unheard of thing is going to happen to her, that some one unknown has told her so, that she is doing to die shortly.

At the same time she seems to realise that she is imagining these things.

Distinctly elated.
 Talks incessantly.
 No hallucinations.
 No fits.

Progress Notes.

Very restless patient; talked to excess; disturbed nurses and patients; in Ward 3 for delirium and then sent to Asylum.

Wasserman - negative. 4'10½"; 6 st. 3½lbs.

Pulse 100. B.P. 160/68.

Treatment.

Chloral and Bromide.
 Morphia.

This patient was admitted to Bangour on 29th August 1925, from Ward 3, Royal Infirmary, Edinburgh. She was in a state of considerable mental excitement and agitation, was incoherent and very confused. She presented the physical signs of exophthalmic goitre.

She was treated for the excitement which continued some weeks after which she began to improve both mentally and physically and was discharged as "recovered" on 19th February 1926.

She/

She was readmitted on 8th December 1926. Since discharge she has been doing well and been in constant employment up to 2 weeks ago or thereabouts when she became restless, distressed and apprehensive.

On admission on 8th December, she was mildly excited and exalted, showed some signs of enfeeblement of mind and memory was not clear. Except for some fine tremors of the hands and tongue and some degree of exophthalmos with lateral nystagmus, she showed no other physical signs of exophthalmic goitre accompanying her mental state.

At present she is quiet but her mental state is now one of depression with slight agitation and apprehensiveness.

Summary.

Patient is a chronic case of exophthalmic goitre. She illustrates two points: (1) that after operation the disease shows a predilection for the nervous system, and (2) that delusional insanity may be a complication of exophthalmic goitre, and that its prognosis is not good.

Case 16. Nellie Lee. aet. 33, single. Pithead
Addiewell. worker.

22.8.25 to 29.9.25.

Description - Housework at home till 8 months ago.
Kitchenmaid in Royal Infirmary,
Edinburgh for 2 weeks, sore feet.
Pit-head worker, last 7 months.

Born - Addiewell.

Water - soft, well filtered, carried in from well.
Last 7 months "Pit-water", bad taste, badly
protected.

Heredity - Goitre, male cousin aet. 36, single.
Nervous diseases - nil.

Personal History - eats to excess; takes excess
meat and tea.

No previous iodine therapy.

Previous illnesses:

Mumps
Fits associated with abscess in neck.
Influenza - 3 years ago.
Carious molar teeth.
Nasal cold every winter.

Emotional disturbance.

- (1) Saw a man killed at pit-head by a "fan engine";
saw the little pieces of his body. Passes site
of accident every day - afraid.
- (2) Fiancé died ?/9/24. Engaged 4 years.
very upset; cannot keep her mind off it.
- (3) Sister died, mastoid operation 1914. The word
operation terrifies her.

Relaxation. 7 a.m. to 3 p.m. with $\frac{1}{2}$ hour off.
goes to bed between 9 and 10 p.m.
does nothing but eat between 4-7 p.m.

Slept very well till 1 week ago; dreams very bad.
murdering her etc. Sleeps from 10 p.m. to 5.30 a.m.
and is usually as tired when she rises as when she
goes to bed.

Puberty. aet. 12½. Periods excessive.

Thyroid Symptoms.

6 weeks ago - noticed small lump on right side of neck.

nil else.

5 weeks ago - Lost appetite for no reason.

2 weeks ago - saw doctor; appetite returned with pills.

Since the doctor told her she had goitre, she has been nervous, restless, shaky. Noticed lump increasing in size.

For last 6 weeks, excessive perspiration; thought working near steam pipe the cause.

Felt heat very much this summer, not susceptible to cold.

Cause of illness.

Fear of doctor, feeble-minded. Says never nervous till 6 weeks ago. Accident and operation and death of fiance.

Obvious Morbid Appearances.

Small stout well-nourished woman.
Rather slightly a hydrocephalic head.
Very excitable and easily startled.
Tremor very well marked.
Very restless.

Thyroid.

No obvious enlargement.
Patches of hyperaemia over gland.
Uniformly slightly enlarged.
Firm not pulsating.
Very small nodule, tender, firmer in upper part of right lobe; rest of gland not tender.
Soft systolic murmur especially on right side.

Eyes.

Exophthalmos very marked, equal.
Stare marked.
von Graefe + Dalrymple +
Stellwag +
Moebius +
Pigmentation of eyelids distinct.

Cardio/

Cardio-vascular.

No palpitation; no pain.
Regular pulse, 120. B.P. 160/68.

Heart $\frac{III}{1\frac{1}{2} | 4}$ localised apex.

Faint mitral systolic poorly conducted.
Loud pulmonary and aortic systolics,
2nd sounds closed

Electrocardiogram - much somatic tremor.
Abdominal aorta - pulsating.

Nervous System.

Intelligence, average.
Very excitable and nervous.
Memory moderate, needs much stimulating.
No hallucinations or delusions.
Easily tired for last few weeks.
Reflexes present.
Well marked coarse tremor of hands and tongue.

Skin.

Coarse, moist, greasy.
Much acne of chest and back.
Localised hyperaemia of cheeks, neck, and back.
Skin feels hot. Dermographia on trunk.
Joffroy's sign - negative.

Respiratory System.

Injected naso pharynx; husky voice.

Gastro-intestinal.

Appetite excessive.
Always thirsty.
No constipation.

Teeth - excessively bad; many stumps; gingivitis.

Stool - 28% of fat in stools (dried),
51% of which are fatty acids.

Urine 1020 acid; amber mucus.

Wasserman/

Wasserman - negative.
Glucose tolerance - no sugar lost.

Basal Metabolic Rate.

26.8.25.	+59%	B.P. 164/78.	86.
11.9.25.	+25%	132/74.	58.

Progress.

On admission very restless and excited;
quietened by chloral gr. V, Bromide gr. XV. t.i.d.
and aspirin gr. X. nocte.

2.9.25. Teeth extracted.

From now, rapid progress, less excited.
i.e. toxic absorption from septic teeth deleterious
on thyroid.

26.8.25. P.P. = 86, 11/9/25. P.P. = 58, Pulse 90 → 82.

From end of month patient allowed up. Pulse = 82.

29.9.25. Discharged: up all day for 1 week.
Mental condition deficient.

Treatment.

Gargles, chloral gr. V, Brom. gr. XV. t.i.d.
aspirin. gr. X. nocte. Mist. casc. co.
b.i.d.

Weight

Blood Pressure.

7 st. 6 $\frac{3}{4}$ lbs.	24.8.25.	160/68.
	28.8.25.	146/62.
	2.9.25.	134/64.
	8.9.25.	132/60.
	13.9.25.	128/60.
	18.9.25.	124/60.
10 st. 8 $\frac{1}{2}$ lbs.	27.9.25.	

Summary.

A recent case of exophthalmic goitre who
responded well to rest alone. The abolition of
sepsis by extracting her carious teeth improved her
condition immensely. The condition was brought on by
the fright of seeing a man "smashed" at the pit-head.
Her intelligence was very poor.

Case 17. Catherine Millar, aet. 22, single.
Shop assistant (baker)

31/7/25 to 30/9/25.

Abode - Edinburgh all her life.

Water - Edinburgh supply.

Heredity - Goitre, nil.
Nervousness, nil.

Habits - excessive tea; since illness started,
excessive water, not previously; 12
glasses per day.

No previous iodine therapy.

Previous Infections

Measles, pneumonia aet.3. Whooping cough,
Rheumatic fever, mumps.
Sore throats often.
T.B. glands from neck 8 years ago.
Constipation.

Emotional Disturbances.

1. Excessive fear of rats; bakehouse cellar full of them and she has to go there against her will.
2. Father died 2 years ago; mother became very depressed, reacted on patient.

Relaxation.

12 hours work per day; rushes home for dinner and had a happy life up till death of father. Since then has been worrying.

Sleep. Sleeps well but dreams a lot chiefly about rats.

Puberty. aet. 14. Since thyroid symptoms, menstruation less and is quite irregular.

Thyroid/

Thyroid Symptoms.

Onset.

12 months - headaches, easily tired.
Thyroid, only on seeing her doctor.

3 months - exophthalmos, her friends told her.

1 month - tremor.

2 years - nervous, since father's death.

Patient's own conclusions.

Fear of going to work - rats.
Worry of mother and father's death

Obvious Morbid Appearances

Exophthalmos.
Scar of T.B. Glands in neck.

Is nervous, very intelligent and animated.
Very easily tired before admission.

Nutrition - good.

Thyroid.

Moderately enlarged, equally so.
Firm, granular, vascular gland.
No nodules; no tenderness.
Systolic murmur over gland.
No choking; no dysphagia.
Marked pulsation of vessels of neck.

Eyes.

Exophthalmos equal on both sides.
Slight stare.
von Graefe +
Moebius -
Stellway +
Joffroy +
Dalrymple, just present.

Cardio/

Cardio-vascular.

Palpitation
Tachycardia

Dyspnoea on exertion
95 reg. B.P. 140/65.

Heart $\frac{\text{III}}{\text{I} \mid \text{4}}$

Apex in 5th interspace 1.5" inside nipple line.
Localised apex. Thrust great.

No murmurs.

Marked acceleration of sounds especially 1st
mitral.

2nd aortic sounds +

Nervous System.

Marked tremor of hands.

Emotional, cries and laughs easily.

Headaches and dizziness at times.

Easily tired.

Flushes and sweats.

Skin

Warm, moist.

Dermographia of back.

Nails, nil to note.

Slight oedema of left ankle.

Thorax.

Expansion fair.

Alimentary.

Pharynx congested; pyorrhoea.

Hypertrophy of gums.

Joints.

Carrying angle increased.

Urine - nil. acid 1020. mucus.

Basal Metabolic Rate.

4.8.25.	+ 47%	140/75.
26.8.25.	+ 22%	140/72.
11.9.25.	+ 21%	134/70.
30.9.25.	+ 32%	127/66. excited.

Blood/

Blood sugar - 10/8/25. 85 mgs.%

Treatment.

2.8.25. Tr. Card. Co. Mist. Casc. Co. when necessary.
 15.8.25. Paint gums with iodine.
 9.9.25. Pot. Iod. gr. $\frac{11}{16}$ daily.
 15.9.25. Stop Pot. Iod.

Fat in dried faeces - 18.5 gms.%
 54% fatty acid.

Progress Notes.

Treatment mainly rest in bed; gums painted with iodine.

At end of one month, basal metabolic rate was +22%

Pulse rate 100

Pulse pressure 72.

Weight 7.5 lbs. down in 14 days. Now rising again.

Pulse fell to 90.

After 8 days pulse = 120; therefore back to bed.

Pot. Iod. gr. $\frac{11}{16}$ daily for 7 days.

Pulse fell to 100

Basal metabolic rate = + 21%

Pulse pressure = 74.

Weight still rising.

Allowed up again; pulse = 90 but rose a little because of excitement, before discharge. Pulse pressure = 60.

Blood Pressures.

1.8.26.	130/70.
7.8.26.	140/74.
10.8.26.	146/75.
8.9.26.	136/62.
20.9.26.	132/72.

1.9.26. Got up.

9.9.26. Pot. Iod.

10.9.26. Back to bed.

14.9.26. Got up.

Stop Pot. Iod.

Readmitted/

Case 18. Mrs Agnes McDougall, Married, aet. 22.
Haddington.

Water supply - led in, soft.

Heredity - goitre, nil.
nervous disease, nil.

Personal - nil.

Infections - tonsillitis, influenza.

Sleep - good, no dreams; can be idle.

Shock and strain - no history
married 18 months.
disease 15 months.

Menstrual history - nil to note.

Onset of Symptoms.

Exophthalmos - 2 years.
Palpitation - 1 year; greater since February
after influenza.
Tachycardia - 1 year.
Nervous - "a long time"
Weakness of muscles - especially of thighs.

Thyroid.

General uniform enlargement.
Smooth, soft, now granular.
Right side slightly larger than left.
Localised erythema of neck.
Vascular, systolic thrill and bruit.
No pressure symptoms.

Exophthalmos.

Marked, equal, bilateral; stare present
Dalrymple +, von Graefe +
Moebius - , Stellwag +

Locomotor System.

Increased carrying angle.

Heart/

Heart.

Heart not enlarged.
 Localised threshe
 No thrill.

Pulse 100 per minute, regular in force and time.
 Blood pressure, systolic 154; diastolic 80.

Nervous System.

Tremor present.
 Fine movements of hands - nervousness.
 No headaches.

Skin.

Fine, moist, local hyperaemia of neck.
 Much sweating.
 Nails difficult to keep clean.
 recession from nail of flesh.

Gastro-Intestinal.

Nil to note.

Weight was 10 st. Now 8 st. $0\frac{1}{4}$ lbs.

Treatment- going to Royal Infirmary, Edinburgh,

Summary.

This is the typical vascular type of exophthalmic goitre found in the young woman; the only etiological factors seem to be influenza and tonsillitis.

The treatment was not followed in this case.

Case 19. Margaret Smith, aet. 39, single.
Haddington.

Water - hard and soft, outside.

Heredity - nil. Mother has myxoedema.

Infections - measles, whooping cough, influenza.

Emotional Disturbance.

(The disease began aet. 15.)

At the age of 14 was in bed with fever and cold; Mother left her in bed. On coming back found her on her back on the floor. Had aphasia which lasted 5 hours.

Sleep - good sleeper.

Puberty - aet. 19. Always been irregular and scanty and had 6 years amenorrhoea.

Onset of Symptoms.

Too remote for any history.
Exophthalmos.
Palpitation and tachycardia.
Swelling in neck, blouses would not fit.
Periodic attacks of diarrhoea.
Shaky hands.
Does not consider herself nervous.

Thyroid.

Enlarged symmetrical.
Not vascular; fairly firm.
Greater breadth than in any other case.

Eyes.

Exophthalmos very marked,;as well as the vertical enlargement the eyes would seem to be pushed out. von Graefe is not typical; the upper lid lags behind the other, but does not come down, leaving much of the sclera exposed, i.e. it is in a state of contraction.

Stellwag +, Dalrymple + ,Moebius +.

Cardio/

Cardio-vascular System.

Pulse regular in force and time, 84 per minute.
Blood pressure, systolic 120, diastolic 60.
Heart $\frac{1}{4}$ " enlarged. Mitral incompetence found.
aortic and pulmonary systolic murmurs found.

Nervous System.

Tremors once present, now absent.
Never considered herself a nervous person.

Integumentary System.

Pigmentation of face profound.
Skin is dry; not moist and not warm.
Nails are poor and brittle; the hair is scanty and brittle.

Gastro-Intestinal System.

Appetite poor, once was excessively thirsty.
Nutrition very poor, merely skin and bone.
Used to have short, sharp bouts of diarrhoea,,
lasting a few days and clearing up spontaneously.

Summary.

This may be regarded as an extreme example of the human wreck left by exophthalmic goitre which has worn itself done. Cardiac failure is present; exophthalmos is marked.

Case 20. Jacob Goldstein, aet. 55. Miner,
Penshaw.

Residence - Sunderland district - 30 years - hard water.
West Stanley, Durham, 8 years - soft water.
Poland 17 years - soft water.

Heredity - goitre, nil.
nervous disease, nil.

Patient states that his 2 sons aet. 22 and 18 are developing the disease. The elder son has certainly tachycardia but this is a neurotic factor most probably; the other son is reported also to have tachycardia.

Personal - diet nil.
tea to excess.

Previous Infections - Sore throats; pyorrhoea,
influenza.

Emotional Disturbances - nil, but says he "never likes
to be doing nothing"

Sleep - about 6 hours with dosing.
Light sleeper; dreams; talks in his sleep.

Date of Onset of Thyroid Symptoms.

In 1920, influenza, in bed 13 weeks

6 months later, influenza, in bed 14 weeks.

On getting up found that his heart was beating faster and more forcibly than previously.

1921 - severe headaches.

1921 - noticed his eyes bulged.

April 1926 - doctor noticed that his neck was swollen, says that the swelling varies in size.

In/

In Royal Infirmary, Sunderland, 1.5.26 to 1.6.26.

Left of his own free will; improved.

Pulse 84-100. Weight 11st. 8 lbs.

✓ Pot. Bromid. gr. \bar{X}
 Tr. Bellad. η \bar{III}
 Mist. sod. et Gent.
 ad $\frac{3}{j}$ ss. t.i.d.

Thyroid.

A general diffuse enlargement.
 Soft, granular, homogenous.
 Right side much larger than left.
 No adhesions, nodules or cysts.
 Gland varies in size.
 Systolic murmur in upper pole on each side.
 Not pulsating, warm, no local erythema.

Eyes.

Exophthalmos very marked ; bilaterally equal
 Moderate stare in addition.
 von Graefe + Moebius +
 Stellwag + Joffroy =

A few quick blinks and then Stellwag again.

Cardio-vascular.

Tachycardia; palpitation; dyspnoea, pain.

Pulse irregular, in force and time, about 96-100.

Heart

$\frac{III}{115}$

Diffuse apex in 5th interspace, 5" out in nipple line.

Mitral, systolic and diastolic (?)
 Pulmonary systolic, 2nd sound not accentuated.
 Aortic and pulmonary systolics,
 aortic 2nd sound not accentuated.

Blood Pressure - systolic 180; diastolic 90.

complains/

complains of attacks of pain
over praecordia and down the inner side of the
left arm stopping short at the elbow.

Radial Arteries thickened. Carotid arteries
pulsating.

Nervous System.

Tremors - of fingers present; fairly well marked.

Sleep - 6 hours, poor, light, with dreams.
speaks in his sleep.

Headaches - on vertex, severe, scarcely a day passes
without them.

Vertigo - present.

Emotion - excited, suppressed.

Skin.

Moist and fine, but not warm to excess.
Patches of leucoderma especially in axillary
regions.

Joffroy -
No trophic changes in nails.

Respiratory.

Nil to note, except dyspnoea (? cardiac)

Gastro-intestinal

Appetite good, thirst a little to excess.
No vomiting, pain, constipation or diarrhoea
Teeth - some pyorrhoea present.

Urine 1020. acid nil.

Summary/

Summary.

A case of chronic exophthalmic goitre probably following influenza; in a Polish Jew: possibility of family developing similar condition; able to work with damaged heart. Leucoderma present. May have followed on influenza.

CASE 21.

DOROTHY MacKAY aet. 33. Mr. Housewife.
Sunderland. Para 4 10 years married.
 1:2:27 - 28:2:27.

Residence - Sunderland.

Water - hard: not led in.

Heredity - Goitre - nil.
 Nervous Disease - nil.

Personal & c. Food - nil to note.

Previous Iodine Therapy - yes.

Previous Infections - Measles: Pyorrhoea 7 years ago.

Emotional Disturbance - strain of nursing a weakly child for 10 months night and day on end.
 - child died of Pneumonia 27/2/23.

Rest & Sleep - now sleeps well.
 previously slept very badly.

Puberty - 13. Para 4.

Operations - operated on by Dr. Ross Nov. 1925.
 Partial Thyroidectomy.

Date of Onset of Thyroid Symptoms.

Spring 1923.

4 years ago after death of child -

Palpitation, Tachycardia, Dyspnoea,
 Nervousness, Flushings, Heat all over.
 went to bed, and on getting up

4 months later - thyroid swelling
 exophthalmos.

XRay treatment - April 1924 - July 1925.

Put to bed - Feb. - April 1924, for 11 weeks.

Admitted R.I.S. - 13:11:25.

Rx Lugol's soln. - Pulse 90.

Operated on 26:11:25.

isthmus/ Right lobe and /cut away.

Accessory thyroid was present with a groove between and a piece of thyroid was curled round trachea

After operation - rapid pulse for a few days.

28:12:25 - slight palpitation no tremor no thyroid thrill sleeps well.

3:1:26 - Pulse 150 exophthalmos less.

Since then she has has Lugol's solution with not very /

very great results - the pulse does not seem to have fallen below 112.

Microscopic Report.

Eyes.

exophthalmos equal and bilateral: slight stare pupils not dilated.

Says that the exophthalmos has been worse. Von Graefe +, Stellway +, Dalrymple +, Moebius + Joffroy +.

Thyroid.

Right half & isthmus removed Dec. 1925. There has been some swinging round of the thyroid to the middle line.

The thyroid has lost the typical granular feel of the exophthalmic and is exceedingly hard. Near the isthmus there appears to be a small adenoma and on the extreme left there is a groove almost dividing the left part into 2 entities. The lateral part is softer than the rest. Systolic murmur: no thrill.

Heart.

Pulse reg in force and time.

III
1/4 in 5th interspace. apex localised.
Both sounds are closed in all four areas.
The sounds are very loud.

Nervous System.

fine tremors present: have been worse.
Sleep good: no headaches and no dizziness:
easily tired: difficulty in walking upstairs
from weakness of quadriceps femoris: never
at rest.

Integumentary System.

Skin - warm: not moist: Joffroy+: nails
striated but not brittle.

Respiratory System - nil.

Urinary System - trace of sugar usually present.

Alimentary System - good appetite: excess thirst.

Weight - 1/2/27 10st. 10½ lbs: 23/2/27 10st. 7½

Blood Pressure - "diastolic shading" marked.
capillary haemorrhage from sphygmomanometer.

150/82-56. 1/2/27.

150/70-50. 13/2/27.

Notes /

Notes on operation. 26/11/25. Dr. Z.M.H. Ross.

Pulse 120 per minute: under Lugol's solution
2 t.i.d. This was reduced in 12 days to 96.
Right lobe and isthmus were removed: Lugol's
solution continued for 5 days after operation -
pulse 100 on discharge 10/12/25.

Microscopic report.

Glandular hyperplasia: epithelium high and
columnar: acini show papillary infolding:
small acini: colloid deficient: small collec-
tions of lymphoid cells present and some scar
tissue.

Treatment.

Pot. Iod. gr $\frac{1}{2}$ b.i.d. from 9/2/27 - 23/2/27.

Summary.

The disease seemed to have followed a prolonged
mental and physical strain - the nursing of a sick
child night and day for 10 months.

The thyroid was exceedingly hard - probably an
effect of XRays ?

There was a definite improvement after the oper-
ation - but apparently not enough thyroid was taken
away.

The heart did not seem to be enlarged and there
were no systolic murmurs.

The pulse pressure was increased and the diast-
olic shading was marked.

Nervous irritability was ^{very} marked: extreme rest-
lessness; shifting of the gaze from one object to
another, making many useless but semi-purposeful
movements of the hands - smoothing her clothes, etc.
Snapping eyes: incisive speech: Fearlessness and
marked /

marked self-confidence: Loss of strength in thigh muscles was a symptom. Sugar was present in the urine. The result of her stay in hospital under iodine treatment was a general improvement, with lessening of the exophthalmos and the stare. The effect on the pulse was disappointing - it kept to between 90 and 120 - there was no improvement in this.

The possibility of small adenomata must be regarded as a probable reason of this failure.

ANTHONY WELSH aet. 41. Joiner.Silksworth.

6/2/27 - 7/3/27.

Birthplace - Silksworth - outside tap - hard water.Heredity - nil.Personal - nothing to excess: now drinks little fluid: has never taken much raw food. previously was intensely thirsty.Previous Infections. - Measles: Flue: St. Vitus Dance - aet. 12: Pyorrhoea: Nasal Catarrh.Emotional Disturbances - unhappy married life. married 1908 - left his wife 1912. cat and dog life: much worry: very little sleep.Mental and Physical Rest. - has opportunity. Sleep is poor: dreams - sometimes wakens with nightmares: he can't rest - he must be walking about. Sometimes walks 15 - 20 miles.Date of Onset of Thyroid Symptoms.

Patient was unaware that he was suffering from much wrong other than rundownness when he went to enlist 1914: sent to hospital with exophthalmic goitre: nervous all his life: palpitation tachycardia as a boy.

R.I.S. 17:11:21 - 26:1:26 aet. 35.
 exophthalmos: palpitation on exertion: tachycardia: tremor in hands: general nervousness: certain flushings: moist skin: headaches: sleeplessness: anaemic: excess thirst: Stellway+, Von Graefe +, Joffroy + Moebius. +.

Slightly granular thyroid.
 Weight 7st. Pulse 90-112, chiefly 100-112.

R was Bromide: belladonna; digitalis; thyroid up to gr. \bar{V} t.i.d.

Thyroid. - none palpable left. scar of old operation 1922 October.Eyes. - exophthalmos slight: bilateral and equal: pupils not dilated: no stare. Von Graefe - Stellway -, Dalrymple - Moebius /

Moebius + Joffroy. +

Cardiovascular. - Pulse regular in force and time -
80 p.m. wall thickened and tortuous.
Blood Pressure - S 160 D 94.

III

Heart $\frac{1}{4}$ heart sounds poor.
systolics in all areas. Aortic 2nd +
loud whistling Pulmonary systolic murmurs
Co. - pain over heart - dizziness:
cold hands. this brought him to the
R.I.S. - still has palpitation on
exertion.

Nervous. Tremors not now present: can be brought
on by tobacco: Vertigo present espec-
ially on something quickly passing him.

Skin. hyperaemia: no flushings: no pigment-
ation: nails - were brittle: lines
vertical: suggestion of scoop at base:
hands now cold.

Respiratory. nil.

Gastro Intestinal. eats dry meals - no upset -
appetite good: used to drink excess
water previous to 1914. no constipation:
diarrhoea: vomiting: teeth removed
wholly 1924 for Pyorrhoea.

Blood. no Anaemia.

Urine. nil.

Carrying Angle - increased.

Progress Notes. Treatment. Pot. Iod. gr. $\frac{1}{2}$ b.i.d.

This man's pulse was never quick: it varied
from 70 - 88. Pot. Iod. had no appreciable change
on its rate. While in hospital, whether due to Pot.
Iod. or not he did lose what tremor he had, there was
slight regression of his exophthalmos and his vertigo
disappeared. He gained 5 lbs. in 4 weeks and said
he felt very much more fit.

Blood Pressure 140/90 on discharge.

Since then he has reported twice - at the first
visit /

visit he 'complained' that his heart did not now go quickly as it once did: it was about 90 at his first visit: at his second visit it was 78 and he had walked $2\frac{1}{2}$ miles to the hospital. He said he was more fit than he had been for years.

CASE 23.

THOMAS JOHNSTONE aet. 43. Southwick.

Plumber: married: 4 children.

19/1/27 - 27/2/27.

Residence - Sunderland all his life.Water - hard: led in.Heredity - Goitre nil: Nervous Disease nil.Personal - tea to excess:
no previous Iodine Therapy.Previous Infections - Rheumatism - 12 years ago.
Pyorrhoea: Chronic Pharyngitis and
Laryngitis. Tonsillitis followed by
Septic Arthritis - 2 years ago, and 2
attacks of Tonsillitis since then.
Septic Tonsils still found.Emotional Disturbances - of a worrying nature: out
of work: Sleep poor: for 15 years
only 4 hours per day.Onset of Thyroid Symptoms.

Unknown.

Sweating - 20+ years: Nervousness 25
years.
exophthalmos 30 years: goitre una-
ware of it.Morbid Appearance.exophthalmos: flushed skin: enlarged
thyroid: nutrition good: no stare.Thyroid.enlargement of whole gland - both lobes
and isthmus: generalised moderately
firm granular feel: right lobe larger
than left.
systolic and diastolic murmurs at upper
poles: no special erythema round gland
Pulsating Carotids.Heart.Pulse - irregular in time and force.
at worst about 90 - 100. $\frac{III}{L/5}$ in 5th interspace.large diffuse throbbing apex: Mitral
systolic /

systolic diastolic. Pulmonary
 systolic. Aortic 2nd ++ ,
 Palpitation and Tachycardia since 1925
 worse.
 Blood Pressure - systolic 142
 diastolic 80.

Eyes.

bilateral symmetrical exophthalmos.
 Von Graefe +
 Dalrymple +
 Stellway +
 Joffroy -
 Moebius +
 Slightly dilated pupils.

Skin.

fine: moist: warm:
 sweating: no pigmentation:
 nails difficult to keep clean - not
 brittle: striations not very marked:
 scooped near fold.

Nervous System.

fine tremor of hands:
 sleep poor;
 feels tired and languid often:
 marked self assurance and lack of fear
 re operation.

Respiratory System - nil.Gastro intestinal System.

nil to note but admits excess thirst
 after asking: appetite very good.

Urinary System - nil.

Glucose Tolerance Test

From Hospital Notes of 15/1/25.

Tonsillitis and Septic Arthritis urine - ;
 exophthalmos: swollen throat:
 Auricular fibrillation: heart dilated
 for 4 days: Mitral systolic propagated.
 later developed presystolic murmur.
 Von Graefe +
 thyroid slightly full.
 Ac. dilatation of heart: Septic Tonsil-
 litis and Arthritis: Mitral Stenosis &
 In-competence.
 Exophthalmos less on discharge.

Progress/

Progress Notes.

In R.I.S. five weeks: gained 6 lbs in weight - 8st. 7 to 8st. 13 lbs.
 Operation for tonsils and teeth without incident:
 never had any stare: exophthalmos decreased: felt better in himself but had to hurry out of Hospital: Pulse tracings inconclusive because of (1) digitalis (2) fibrillation.

Treatment.

24/1/27	Tr. digitalis	m \bar{x} t.i.d.
27/1/27	" "	m \bar{x} "
31/1/27	Stop digitalis.	
8/2/27	Pot. Iod. gr $\frac{1}{2}$	b.i.d.
23/2/27	Tonsillectomy and teeth extracted.	
27/2/27	Went home.	

Summary.

A case of exophthalmic goitre showing the chronicity so common in male cases: probably followed tonsillitis: the cardiac condition is probably both rheumatic and toxic from the exophthalmic goitre: one would not expect such efficiency from a purely rheumatic heart at this stage.

no pulsation of gland: pulsation of carotids:
no erythema.
Gland has varied in size.

Eyes.

Exophthalmos equal and bilateral:
pupils not dilated.

<u>Signs</u> - Von Graefe +	Moebius -
Stellwag +	Joffroy -
Dalrymple +	

Slight pigmentation.

Cardiovascular System.

Pulse regular in force and time - rapid 130.
Vessel wall just palpable.
Blood Pressure - systolic up, diastolic low.
Blood Pressure = 130/70-60 ..40.

Heart . $\frac{III}{I^4}$.

Apex - 4th interspace just cut, to nipple.
localised: forceful.

Both sounds closed in all four areas, except the
Pulmonary - systolic murmur.

Carotid Arteries pulsate.

Nervous System.

Slight involuntary tremor fine: is nervous:
Can still climb scaffolding with assurance.
Emotion - suppressed forcefulness: incisive
speech: Easily tired.
No headache or vertigo.

Skin.

fine: moist: hyperaemia: warm: greasy:
little brownish pigmentation:
nails are very brittle and difficult to keep
clean - very concave and scooped.

Respiratory System - nil.

Gastrointestinal System.

Appetite good as a rule.
thirst - occasionally slightly excessive.
pain - nil.
constipation - nil.
diarrhoea/

diarrhoea - occasionally has slight attacks lasting a few days which clear up themselves.

Urinary System.

Slight trace of sugar frequently.
After Glucose Tolerance Test -
sugar in both specimens.

Observations.

Vasomotor instability - flushing and tachycardia on seeing a doctor - knew it himself.
Pulse rate fell - see chart.
Later he was operated on for sequestra of olecranon with rise in pulse for two days. He then started to worry about going home because of wife and five children and his pulse went off until discharge.
Exophthalmos became less.
Thyroid - if anything slightly smaller.
Tremor - slight - still present.

Wasserman negative.
8st. 12 lbs on admission
9st. 7 lbs 4 weeks later - before operation
9st. 4 lbs 5 " " - 1 week after "
9st. 7½ lbs 6 " " - on discharge.

Treatment.

24:2:27 Tr. card. co. $\frac{7}{10}$ \bar{V} b.i.d.
1:3:27 Pot. Iod. gr. $\frac{7}{10}$ b.i.d.
9:3:27 Pot. Iod. gr. $\frac{1}{2}$ b.i.d.
7:4:27 Pot. Iod. gr. $\frac{1}{2}$ once daily.

Summary.

This case is probably neurogenetic in origin, following sexual repression: Patient shows the lowered resistance to infection present in the condition: a septic bursitis failed to heal and spread to the bone underneath. Pulse shows a fall in rate: worry and operation probably account for the rise before discharge.

Case 25. Arthur Pink, aet. 41. Clerk, single.
Grangetown.

Birthplace - Sunderland all his life.

Water - hard and protected.

Heredity - Goitre, nil.
Nervous diseases, nil.

Personal - appetite varies much.
excessive water; teetotal.

Previous iodine therapy - nil.

Previous Infections.

Scarlet, typhoid, measles, pthisis, influenza
more than once, influenzal pneumonia, pyorrhoea,
Infections of nose and throat.
No constipation, 4 motions per day for last 3 years.

Emotional Disturbances.

Worries a lot over his work; feels nothing he
does is right; worries both night and day.
Worried much over death of favourite brother
one year ago.

Rest, mental and physical.

Cannot rest; always worrying.
Dreams of his work, wakens 3-4 times each night.
No physical exercise; reads in his off time.

Onset of Thyroid Symptoms.

Ideas too vague to be accurate.

1912 - last felt really well. The cricket team of
which he was secretary broke up, he lost
interest in things, and has never been the
same since.

Attacks of irritability and depression.

1912-18. Tried to pass for the army and failed.

8 years - exophthalmos.
 tachycardia - also felt as if his heart occasionally missed beats; he got out of bed while in an influenza attack and dates tachycardia from this.

- (1) 2 years - palpitation.
- (2) 2 years - felt warm; perspired, does not feel cold.
- (3) 2 years - goitre.

1 year - feeling of general weakness.

Of late - noticed that his nails were more difficult to keep clean (on suggestion). Headache, drowsy feeling.
 Buzzing sensation in ears.

Weight - 5 st. 9½ lbs.
 6 st. 5½ lbs. at army examination.
 7 st. 6 lbs. maximum.

Thyroid.

Enlarged; right lobe slightly larger than left.
 Visible pulsation.
 Firm, granular, thrill present.
 Murmur continuous with systolic accentuation most marked in upper poles.
 Smooth, no nodules, no tenderness.
 Vascular, no adhesion to skin.

Pressure Signs.

Does not vary in size.
 No dysphagia.
 Choking sensation at times.

Eyes.

Exophthalmos, slightly greater on right side.
 Stare has now greatly disappeared.
 Von Graefe +
 Stellwag +
 Dalrymple +
 Moebius -
 Joffroy +

Retraction of upper lid marked.
 No pigmentation.
 Pupils small, not dilated.

Scar/

Scar of old corneal ulcer present in left eye.
ophthalmoscope - retinal vessels.
optic nerve.

Cardio-vascular System.

Pulse irregular both in time and force.
Occasional missed beats.

Palpitation

Tachycardia. 90 at apex. 77 at wrist.

Cardiac pain absent.

Heart - $\frac{III}{1/4\frac{1}{2}}$

Apex localised in 6th interspace in nipple line.
Action heaving but not forcible.
Slight shock of sounds present.

Mitral systolic propagated into axilla.
2nd sound closed.

Pulmonary - loud whistling systolic, 2nd sound closed.

Aortic and tricuspid both closed.

Pulsation of arteries of neck extreme.

Capillary pulsation.

No venous pulsation present.

No vascular erythema.

B.P. ? 122/60.

was fibrillating 6 months ago.

Nervous System.

Unrest manifested by excessively strained look,
and suggesting inhibition of movement.

Tremor of fingers not marked; says he has
attacks of irritability and bad temper.

Skin.

Warm and moist; no erythema.

Pigmentation of face, not of groins or axillae.

Hair, falling out.

Pruritus, slight on back at times.

Nails, slightly brittle; says they are more
difficult to keep clean, separation of nail from
nail bed distally; longitudinal nail ridges.

Transient infiltrated oedema was present on legs
1 week ago; some on admission.

Respiratory/

Respiratory System.

Lungs, expansion deficient.

Healed cavity above spine of scapula on right side posteriorly.

Alimentary System.

Appetite varies - very good - at present poor.
Thirst - drinking excessive water for a long time.
4 motions per day outside of Royal Infirmary,
Sunderland.

No vomiting.

Abdomen, nil to note.

Advanced pyorrhoea present.

Wasting - present.

Some anaemia.

Progress Notes. On discharge.

- (1) Thyroid became more soft; decreased in size.
- (2) Stare gone.
- (3) Exophthalmos decreased in size.
- (4) Eyes "water" less.
- (5) Palpitation decreased.
- (6) Heart improved. Auricular fibrillation still present.
- (7) Eye gives sensation of locking.
- (8) Abscess in lip at discharge.

B.P. 132/60 on discharge.

- (9) Sleeping well.

Weight - 5 st. 9½ lbs.; on discharge 5 st. 10½ lbs.

Blood pressure - 124/60 at entry: 132/60 at discharge.

Pulse steady at about 74-88, usually 80-88.
difference of about 4 beats per minute between
pulse at wrist and heart beat.

Urine - negative.

Sugar tolerance test - sugar in second specimen.

Summary/

Summary.

Patient of the "gracile" type; poor development; high pitched voice; of worrying nature; healed pthisical cavity present. Cardiac failure present, auricular fibrillation but function surprisingly good. Much pigmentation of face present.