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A Case of paradoxical temperature with notes on other cases & comments.

C. M. Anderson.
52. East 81st
Faversham.
Kent.

A case of Paradoxical Temperature.
This case has occurred in my practice & I will begin by a detailed account of the patients family history.

Family history.

Father - twice married. He has had ~~nine~~ ten children by his first wife - 5 sons & 5 daughters.

Sons. all living.

Eldest. He is in good health now, but some years ago developed phthisis & was ordered abroad, which has arrested the course of the disease.

Second. Has all his life been rather delicate, having shown catarrhal tendencies. He was always catching cold. There is no evidence however of phthisis.

Third. Had pneumonia when a boy & his chest has always been delicate. i.e. has always wanted looking after if he caught cold.

Fourth - This is the only son I have seen. He appears strong, but when an infant suffered from an abscess on the right side of the neck, which has caused considerable deformity, viz. a lateral flexion of the head upon the shoulder.

There is no history of any weakness of the chest etc there-on.

Fifth - Is a weakly individual. She is a hunchback, but though he too has a tendency to catarrhal affections, there is no evidence of any lung mischief.

Daughters - 5. all living.

Eldest - Is married & has one child. a boy, who is quite strong & healthy, but in common with the rest of the family has a tendency to catch cold.

Second. This the daughter whom can I am going to describe.

Third. Is strong & healthy. She has a tendency to colds & coughs, but has never had bronchitis or pneumonia

Fourth. Is always catching cold, & is always a long time getting rid of coughs. She suffers severely from migraine headaches.

Fifth - Is a delicate child aged 13 years. She has suffered from asthma since birth & now presents all the features of a well-marked asthmatic Constitution.

The mother died of galloping Consumption soon after the birth of her last daughter.

The Father - Is a strong healthy active man of rather rheumatic tendencies, but has never had any chest trouble. He married a second time & had one child by his wife, a girl aged three years, who is a delicate looking child, with a marked tendency to catarrhal trouble. Has several times had bronchitis.

The second wife died also of galloping consumption soon after the birth of her child.

The family history shows very clearly that there is a marked tendency to chest delicacy & I should mention that one of the daughters is of very nervous temperament - the one that suffers so much from headache. Into this brief outline of the patient's family history I will proceed with the patient's personal history.

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Personal history.

Female. aet 25 years —

She is of very nervous temperament.

From her birth she has never been at all strong, & was never able to what other children could. When an infant she suffered from attacks of purulent ophthalmia, which accordg to her own account recurred at intervals, every year.
When about 10 years old had an attack of eczema on the hands.
Soon after this had an attack of Bronchitis, which went on to Pneumonia & pleurisy. She does not recollect on which side the inflammation occurred, but at the base of the left lung there is an area of marked dullness, which is no doubt due to thickening of the pleura, the result of this inflammation. The illness was a severe one, & the patient was confined to the house for 8 months.
It is from this time that the chest trouble dates. Ever since, she has been liable to have, what she calls, "chest attacks", apparently somewhat similar to the attacks which will subsequently be described.

By her own account these chest attacks alternated with the ophthalmia. If she had one she did not have the other. They returned but at long intervals, about once a year generally.

About 4 years ago had a Contraction of the right leg, which was put straight under chloroform, & the limb put up in Plaster of Paris for some time. The patient does not know of any cause for this.

Three years ago had 3 attacks of Influenza, one after the other, & she was advised to go abroad. She went to Bordeaux where one of her brothers lived. She did not appear to have improved at all, & at that time she occasionally brought up blood in the Expectoration. The Expectoration was at times often profuse & foul & was treated for some time by several Doctors for phthisis, until her condition was recognised as due to bronchiectasis.

She has been Confined to bed for the last year.

The Patient first came under my notice in the late summer of 1894, & the following was her Condition, of which I propose to give a detailed account.

Condition on examination -

Confined to bed - Her General appearance being that of a person suffering from phthisis or some wasting disease.

The features somewhat pinched, & there is a hectic flush on the cheeks.

There is no clubbing of the fingers.

The complexion is not sallow -

Patient though thin, cannot be described as emaciated.

Systems -

Alimentary

Tongue thickly coated with a brown fur.

There is a total absence of appetite & it is with difficulty that the patient can be induced to take sufficient nourishment to maintain her strength.

She complains very much of thirst.

The bowels never act spontaneously, & for some months past relief has been obtained by copious

Emaciated.

Circulatory system.

Heart sounds are weak, but otherwise normal.

The apex beat is in the 5th inter. Space, about 1 inch internal the nipple line.

The pulse is rapid, badly filled & weak. The rate at the time of examination being 120 per minute.

Respiratory System.

Breathing thoracic, very shallow. Somewhat irregular & rapid, rate being 45 per minute.

Any attempt at deep inspiration causes a severe pain in the side.

Cough very troublesome & is always worse at night.

Sputum. Copious - muco-purulent, & slightly frothy. It is not very viscid, & has no tendency to become nummular.

The alae nasi move in respiration.

Microscopic investigation shows an absence of Tubercle Bacilli.

Thorax - Inspection.
Type of chest. Somewhat long and narrow.
Expansion not very good.
There is a good deal of depression below the clavicles, more so on the left side than the right.

Palpation.
Vocal fremitus increased all over the chest, but more so on the left side than the right - The increase on the right side is only slight.

Percussion.
There is dullness of the left apex which is specially marked in the Supraclavicular region. At the base posteriorly on the left side, emerging into the cardiac & splenic dullness, is an area of marked dullness, due no doubt, as above stated to old pleuritic thickening.
On the right side the note is fairly resonant all over the chest. The note being more a want of perfect resonance than dullness.
The heart & lung dullnesses are absent, owing to the lung being

distended.

Auscultation.

Medium pitched bronchial breathing at left apex, which merges into harsh vesicular with prolonged expiration over the whole chest. The breath sounds are somewhat faintly over the area of dullness at the base.

There is distinct bronchophony in the left supraclavicular region.

The only morbid accompaniments are a few râles scattered over the whole side.

On the right side the breathing is harsh vesicular with prolonged expiration & a few râles.

Integumentary System.

Patient complains of heat of the upper part of the body & coldness of the lower. Her hands being very hot & feet very cold to the touch.

She suffers from Excessive perspiration. This is so great that the sheet can be wrung out of her clothes, & mattress & pillows are constantly saturated. So much so that it is difficult to keep these things

from getting mildewed.
It is also a difficult thing to prevent the formation of bed-sores, as the skin is constantly macerated, & the bony points are very prominent.
There is considerable emaciation.
The mammary glands are quite atrophied.

Urinary System

Urine. High coloured & somewhat scanty in amount.
Reaction acid.
Deposits Urates.
No Albumen, Sugar or Blood.
Sp: Gr: 1020.
Slight mucus cloud present.
Slight excess of phosphates.

Reproduction System.

Patient used to menstruate quite regularly, but has now ceased to menstruate for about two years.

Nervous System.

Cerebral & mental functions are normal, except that patient complains of loss of memory.
She always suffers from sleeplessness, which is aggravated by any occurrence of pyrexia.

The optic discs are normal.

Treatment.

Patient had been under treatment for some time or before I saw her.

She has been confined strictly to bed, with a bronchitis kettle going night and day.

Symptoms have been treated as they arose. All sorts of remedies have been employed, but with no lasting benefit.

Diet has been fluid. Milk - beef-tea - brandy.

With this account of the patient's condition I will proceed with the description of the first occurrence of an 'attack' with high temperature, that is since she came under my care. Up to Sept 11. she had been under the care of my late partner & in his absence I was called to attend her.

Sept: 11th 1894. I was sent for in the afternoon. I had already seen her in the morning, & then was there apparently nothing unusual about her condition -

but she became suddenly worse after I had left.
I found her semi-unconscious; she could with difficulty be roused for a few seconds at a time she relapsed into unconsciousness.
Her breathing was very rapid, shallow and irregular, and appeared to cause severe pain.
She was not coughing much.
The temp: in right axilla 104·6°
I may here remark that I had no knowledge of the patient having any peculiarity about the temp: & the patient herself was unaware of the fact.
The respirations were 60 per minute.
Pulse. 130 - quite regular, but very weak.
Examination of the chest revealed nothing to account for the patient's condition, but there appeared to be inferior pain in the left side. The diaphragmatic movement caused inferior pain, so that a very thorough examination could not be made. Even moving her arm seemed to cause pain.

I ordered poultices to be applied to the chest. This was at about 6.p.m.

I saw her again at 7.30 & she was then much worse. She was delirious and very restless tossing her arms about & moaning. Her condition appeared to me to be so critical that I told her Father that I did not think she could live through the night. Her Father subsequently told me that she had more than once been in a similar condition & had been given up by nursing sisters.

Her Temp: now in Right axilla registered 108.2° F.

Pulse was now 140 - very weak but quite regular.

Respiration 80 per minute - very shallow. & catching as if the act caused severe pain.

She was soaked with perspiration, but the Skin was burning hot.

I ordered an ice-cap to her head & had the body sponged with ice-cold water. her temperature & pulse being watched.

I ordered Quinine - 10 grs every 4 hours, reduced to 5 grs after 2 doses.

I sat up most of the night and took the patient's temperature at intervals. It will be noticed that the cold application reduced the temperature promptly.

Below is the record of the t°: etc.

	Temp:	Pulse.	Respiration
7.30 p.m.	108.2°.	140.	80.
8.30 p.m.	102°.	140.	56.
9.30 p.m	100.8°	150.	60.
10.30 p.m	100.	140.	50.
11.30 p.m.	98.2.	132.	44.
12.30 a.m.	97.8.	130.	36.
1.30 a.m	98.4.	135.	40.
2.30 a.m.	99.4.	130.	46.
3.30 a.m.	99.	120.	45.

It will be seen that the temperature fell rapidly when cold was applied.

As the temperature fell the pulse became extremely weak, at one time being impalpable at the wrist.

Consciousness returned with the falling temperature.

The temperature on this occasion was taken in the right axilla, by myself.
It was about midnight that her vitality seemed lowest, but in spite of the various signs of severe illness. The patient, after regaining consciousness, & realising that she was considered dangerously ill, prepared to die in the way usually described in story-books, when the good child of the book dies young with cut-and-dried moral aphorisms upon her lips & injunctions to all not to grieve for her. I was in the room all the time, & it was this that made me think that the patient's condition after all was not so hopeless
I left about 4.a.m. & saw her again at 10 a.m., when I found her conscious but in a state of great exhaustion. She also professed to remember nothing after various events of the past night.
For the next 2 days I took her temperature etc - as below

Sept. 12.	Temp.	Puls.	Respiration
9. a.m.	98.6	102.	40
1. p.m.	98.	108	40
9. p.m.	99.4	120	48
Sept. 13th			
Morning.	99.8.	109.	45
Evening.	107.	120	50.

Remarks -

After the temperature fell on the night of the 11th. I ordered 5 grs doses of quinine. which were continued every four hours during the next three days.

At the commencement of the attack the cough. which had previously been very troublesome. with copious expectoration. ceased almost entirely. as did the expectoration & the patient began to complain of the violent pain in the chest referred to above.

The tongue was thickly coated with a brown fur after bowels had not been moved. from 12th to 14th inclusive. for 2 days. This was however remedied.

The urine presented the ordinary appearances usually in hyperæmia i.e. Scanty in amount - very

high coloured a depositing urates copiously.
On the 13th I ordered an acid mixture to clean the tongue. a patient complained very much of it.
Sept. 14th.
Temperature normal & patient began to pick up
Tongue gradually became clean. & She seemed brighter & better in every way, but there was no appetite.
As the temperature fell the expectoration recommenced & the cough became very troublesome.
After this attack periodic rises of temperature occurred, and my then partner Dr B—— saw the patient & told me that on several occasions he found the mercury had risen to the highest point (113°) that could be registered by an ordinary clinical thermometer.
When had a thermometer made which registered up to 120°, but I never found the temperature subsequently above 104·2° —

During the rest of the year 1894. I saw comparatively little of the patient, but she continued in the same condition, having periodic rises of temperature. These I regret to say were not recorded by Dr B——, who was attending her during this time.

On Feb. 27th 1895 I was called to see her, and on this & all subsequent occasions took the temperature in both axillae, & sometimes in the mouth. I could not often do this, as there was generally so much dyspnoea, also the movement of the lips etc, in coughing might have caused fallacious results.
Her condition on Feb: 27th was as follows.

Temperature R. Axilla. 102° F.
L. Axilla 109°.
Mouth 99·4.

Respirations. 70.
Pulse rate 120.

She was suffering from sleeplessness complained of headache and pain in the side.

There was a loathing for food, & the tongue again was thickly coated with a brown fur - I may remark in passing that I don't remember ever having seen a worse tongue than she always had, when her periodical hyperpyrexial attacks occurred.
She perspired profusely, but this she did, on all occasions whatever her condition was.
With regard to her general condition she was not nearly so bad, as on the last occasion viz. in Sept. 94.
I ordered Quinine powders - 5 grs every 4 hours, & did not resort to local application of cold, as her condition was not very serious.
Feb: 28th
Patient semi-unconscious. Coughing incessantly, but no expectoration. Excessive perspiration - bed-clothes & bed being saturated.
Breathing shallow, irregular & somewhat laboured, the alae nasi moving markedly.
Pulse very weak -

The following is the record of the temperature.

Morning to	Right axilla.	100.6
	Left "	101.°
	Respirations.	56.
	Pulse.	130.
Evening to	Right axilla.	99.8°
	Left.	101.4°.
	Pulse.	120.
	Respirations	60.

The patient remained in much the same condition for some days after following is the daily record of the temperature from which it will be seen, that, with one exception. it was higher on one side than the other. viz higher on the left than the right.

March. 2nd.

Temperature. R. axilla. 98°
L. axilla. 100.2°
Pulse. 78 a very weak.

March 3rd

Temperature. R. axilla 102°
L. ax: 101.

Patient very weak & Complains of severe pain in the left side & tightness in the chest.

March. 4th.

Temperature - 101.° in both axillae

Pulse - 90.

Respiration. 50.

March. 5th

Temperature. R. axilla 107.°

L. axilla. 102°

Cough very troublesome - otherwise general condition appears somewhat better.

March. 6th

Temperature. Right ax: 100.4

Left. ax 107.

Patient had a sharp attack of purulent conjunctivitis in the right eye, which lasted a few days.

March. 7th.

Patient much better.

Temperature 98° on both sides

For about a month after this the patient continued to improve. I saw her every day & found her temperature was normal.

The tongue was very much coated & I again ordered an acid mixture & the tongue rapidly cleaned up. & a slight improvement of the appetite occurred.

At this time the cough was very troublesome & the expectoration muco-purulent & very copious. Before getting an attack of pyrexia patient has always said beforehand that she was afraid she had caught cold, or that she knew that one of her "bad times" was coming on. The onset in every instance was the same viz. expectoration ceased entirely & suddenly, & a distressing sensation of tightness in the chest appeared, with sharp stabbing pain in the side (always the left) like that of pleurisy. Auscultation however never revealed any alteration of the physical signs.

On April 1st this various phenomena occurred & patient had another attack of an almost identical nature.

Once more the tongue became thickly coated & the temperature showed variations on the 2 sides.

On this occasion the patient's general condition was very bad, though the temperature was not so high as on previous & subsequent occasions.

On April 1st

Temp: Right axilla . 99.8°
Left " 102.4°

April 2nd

Temp: Right axilla . 101.8°
Left " 103°

Patient sleepless & coughing incessantly.

April. 3rd.

Temperature R. axilla . 101.°
L " 104.°

Patient delirious.

April 7th. The temperature was normal & remained so until April. 15th.

All this time the cough was very troublesome.

Ap: 16th

Temp: R. axilla . 100°
L. " 103°

This state of the temperature continued the rest of the month.

On May. 1st. I found the temperature 107.6 in the left axilla.

99.6. in the right.

Pulse. 100.

Respiration 50.

Patient's condition on this occasion was not quite so bad as on previous

occasions when high temperature occurred. I ordered Quinine powders 5 grs - every 4 hours - & the temperature gradually returned to normal. the patient being at her usual level of health in 2 days.

This concludes my record of the case. The young lady went away & when last I heard of her - in the beginning of this year, she seemed to be in exactly the same state of health & having periodical attacks of high temperature.

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I will now give an account of all the reported cases I can find that bear any likeness to the one described. & I will defer any remarks on my own cases until after the description of these cases.

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1. Case of high temperature after Typhoid Fever. - Reported by Dr Dunkin. (Lancet. 1878. Vol. 1. P. 678)

Patient a Nurse aet 19 yrs. Had been feeling unwell since Jan. 1st & since 6th had diarrhoea. Took to bed on Jan 13th. Rose spots appeared and diarrhoea continued.

On the 15th. Temperature in morning 105°.
" in the evening 105.2.
18th - morning t°. 105.2.
Evening t° 98.5. in axilla, & shortly after 100° in the rectum. There was no obvious change in other symptoms with this fall of t° and no evidence of danger independently of the high temperature.
21st - Temp. 109.4. at 8 p.m. - In the afternoon of this day patient was at her work, being previously lying down in the bed.
She was put into a bath at 90° & kept in it sometime, the temp: following between 97.8 & 98.6.
There was no diarrhoea after this date.
At the time of the high t°. pulse 88 - abnormal heat of the skin observed.
25th at 10 p.m. temp: 110°.
Shortly after with another thermometer temperature 109°. There was no delirium & the pulse was 92.
The respirations were natural & the skin not hot.
28th at 10.55 p.m. temp - 109.2.
10 minutes after 99.2 in axilla
98.9 in mouth
99 in rectum.

Pulse rate 96 - & the patient complained of flushings & rushes of heat. A thermometer was now strapped into the axilla, & it was noticed that the high temperatures were of very short duration. Every time it was removed it was never less than 108° & several times 111°.

Feb. 23° at 6 p.m. temp: 107.2 in right axilla, a maximum thermometer in left axilla 107.8.

Five minutes after temp. in mouth registered 98.8 & in right axilla 98.8.

Pulse 102. Respirations 32.

The skin was very hot.

No disease of any organ could be discovered.

During her stay in the hospital patient had complained of dysuria & urine was found to contain blood, some mucus & vaginal epithelium & 1/3rd albumen. This disappeared in a few days (N.B. Dr Barkis does not state whether this had any relation to the high temp: but apparently it had not)

The patient went back to drug at childrens hospital & the

high temperature ensued.
Between Apl. 18 & 25th temperature was never below 105°, the patient having dysuria, extreme pain in left side of abdomen & constipation.
On the 18th she was examined by Dr Fancourt Barnes & uterus was found to be retroflexed, & the left ovary prolapsed. Since the examination her temperature remained higher.
On Apl: 24th there was slight albuminuria, with puffiness of the ankles, but this all disappeared in a short time -
Dr Dorkin makes the following remarks on the case.
There are 3 objections which may be brought forward in this case.
1. Error in observation.
2. Inaccuracy of instruments.
3. Imposture.
1. With regard to this. the most elaborate precautions were taken to prevent any error.
2. Inaccuracy - Several instruments were used, & they were all tested -
3. Imposture - Temperature was sometimes taken when patient was asleep & precautions were always taken -

The catamenia ceased in this case, about the beginning of the year, until the beginning of Feb: when a slight flow occurred.

In the Lancet 1879 vol. I P. 367 & 401.

Dr Dunkin continues the remarks on his case. He says.

1. The high temperature was generally unaccompanied by any discoverable constitutional Symptom other than flushing.

2. Temperature very evanescent.

3. Temp. not localised to portions of the skin, as high temperatures were taken in the mouth.

Dr Dunkin then remarks on the fact that actual physical effects are produced in hysterical patients by nervous changes engendered by mental impressions.

taken.

The entozoaria in this case escaped about the beginning of last year until beginning of Feb: when a slight flow occurred.

Case. 2. Remarkable oscillations of temperature without apparent cause. Reported by Walter Phipps FRCS Ed: in Lancet. 1878 vol. II P. 728.

Patient - Miss L. aet. 18 years. Contracted measles during an epidemic at a school where she was. She had a mild attack & was convalescent in a week. She was to get up the following day, but early in the morning was called to see her & found her in following condition. Pulse. 120. Respirations rapid. Face flushed, & manner nervous & vivacity.

Skin dry & tongue coated with a thick white fur.

The bowels were constipated.

There was complete loss of appetite

Temperature 105·4.

Careful examination revealed nothing abnormal.

The patient described as of a nervo-phlegmatic temperament,

being emotional & somewhat excitable.

Menstruation ceased after the 1st month & has never since returned. It commenced at the age of 15.

The complexion had become dark, & acne appeared on the face.

During the next 10 days, the temperature taken in the axilla & mouth showed extraordinary variations. There were quite irregular in point of time.

With the rise of temperature a coincident increase of pulse & respirations occurred. The tongue became coated - the manner became nervous & fidgetty.

As temperature came down the tongue would clean up in a surprisingly short time, even in ½ hour.

The following is a list of some of the temperatures registered.

March. 25th.	T:	P.	R.
9.40. a.m.	101°	104.	40.
2.30 p.m.	104°	120	36.
5.30 p.m.	106.5°	130	46.
9.45 p.m.	102°	120	38.

March. 25th	T.	P.	R.
9. 45'. a.m.	99°	88	28.
3. p.m.	107°	130	30
6. 45'. p.m.	106°	120	50

The treatment adopted was packing. At the end of 10 days temperature began to subside gradually returned to normal.

Some months afterwards - patient still suffering from amenorrhoea. but otherwise brighter & better than she was before her illness.

In commenting on this case her Physician remarks on the probable connexion between the temperature & the hysterical temperament of the patient. & the amenorrhoea combined.

Case. 3.

Case of unusually high temperature thermometric registration under Dr Ormerod at the Metropolitan Free Hospital.

Lancet. 1872. Vol. II. - Nov. 9th.

Patient Ann C—— act 32 yrs. has 4 children.

Described as a pale, weak & hysterical. looking woman.

Admitted. Aug. 23rd
Had good health until 4 months ago. when she came to hospital with acute rheumatism in arms in bed 4 weeks. She went out when her temperature was 104°, as she has never been well since, having had pain in the back joints abdomen, more especially in the right hypochondrium.
On admission. Face pale, with a cold clammy perspiration on the forehead. Haggard anxious Expression. Intense pain in the side.
Pulse feeble. 120.
Nothing abnormal discoverable in chest or abdomen. No signs of cardiac or spinal disease.
Joints not red or swollen.
No albuminuria.
August 24th.
Complained of intense scalding pain in right hypochondrium and ablation was applied.
She was put on low diet with bark & ammonia.
For 3 or 4 days temperature 102 - 101. & after that was reached for some hours.

Various remedies for the sick proved useless - Poultices. Valerian - Bromide of potassium. Bicarbonate of potash & Hyoscyamus all in vain.

Sept. 11th. Patient flushed & excited. Head hot & temporal arteries throbbing. Pulse. 140.

Temperature 107°. - As a mistake was suspected it was taken again & registered 105°. The same instrument placed in the axilla of a convalescent registered 99°, shewing that the thermometer was correct.

Two hours after to 111.4°.

At night 110°. & pulse 156.

20 grs: of Sod: Salicylas had been ordered in the earlier part of the day with no result

Between Sept. 12 & 25. the temperature varied. She continued restless, and complained of headache & sleeplessness frequently.

Sept. 17th - 11. p.m. Temp: 111.4°. Pulse 120. She was sweating and feverish.

A mixture containing quinia was ordered.

Sept. 18th 10. a.m - Te. 105.8. pulse. 140

19th 9. a.m. 111.4. 114

11. p.m. 114.8 148.

She appeared better than in the morning and not so feverish.
She now began to menstruate.

Sept. 20th.

Quite rational - Face flushed.
at 9. am Temp: 115.8. Pulse. 120.
at 9. p.m. 110.4. Pulse 100.

Sept. 21st.

Thermometer at top of index. Pulse 128.
She urine normal.
at 3. p.m. Temp. 113°.
8 p.m. 99.4. Pulse. 100

Sept. 25th. Patient went out of the hospital and nothing further is recorded.

Remarks.

Case is a genuine one. The patient is hysterical, but the high pulse rate precludes the idea of it being simply hysteria.
The thermometers used were all correct, and one was afterwards tested at Kew.
No explanation is offered, but the fact remains that these temperatures occurred without any such urgent symptoms as one would expect from such a temperature.

Case. 4.

Case of hyperpyrexial temperature Lancet

Reported by Dr Graham Still / Res: Med: Officer. Manchester Royal Infirmary.

Patient M. M —— a Nurse. aet 20 yrs.

Admitted Oct. 24th

Patient had been nursing a case of Erysipelas, was afraid she had got it. She however had only a slight blush above each ankle, and a transitory & mild pyrexia.

A few days after retention of urine occurred. This had occurred previously. The case was regarded as one of hysterical retention, & she was treated by electricity. This caused an attack of cystitis.

Oct: 5th — Cystitis removed.

She was examined by Dr Thorburn. she found a prolapsed, enlarged tender ovary.

The patient complained of pain on defaecation after abdominal pain became distressing.

From this time the temperature began to be unsteady & rigors occurred with increasing frequency, each being accompanied by a rapid &

serious rise of temperature.
These were quite irregular as to their period of occurrence.
Perspiration generally followed.
The symptoms of serious illness were absent.
The following is a record of the temperatures taken during or immediately after a rigor.

Jan: 24th.	11. a. m.	Temp: 107·2°
	12.	102·2°
	9 p. m.	101°
Jan: 28th	– at 4·30 p. m.	T°. 113°.
29th	– in the morning	T° 100·8°
Feb: 24th	Morning.	Temp: 98°
	5·35 p. m.	108·6°
	10 p. m.	98·4°
Feb. 21.	at 6 p. m.	112°
Feb. 25.	4·30.	113°
March. 18th.	at 3·30 p. m.	116·4 f.

During last weeks of treatment mental disturbance occurred at first only with the psychical attacks, but latterly almost constant. She has delusions & is melancholic.
At times she is exceedingly violent & always suspicious.
There is no history of insanity whatever in the family.

The retention of urine continued all through this period —
All the observations in this case were made in the axillae.
Different thermometers were used, as several had their registering column driven into the bulb at the top of the instrument.
Subsequent history of the case.
The hyperpyrexia ceased, but a new series of phenomena occurred including general convulsions of great violence, with opisthotonos loss of consciousness involuntary etc; followed by persistent trismus, which simulated traumatic trismus in an extraordinary way.
She however gradually improved & on Sept: 12th was removed to a convalescent home, She got quite well & is now a nurse in the same institution.

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Case. 5

Hyperpyrexia in a case of Typhoid.
Reported by Dr Stephen Kantelis - Berlin.
in Lancet. March. 9th 1879.
Patient a girl aet. 5 years.
Called to see the child on 9th of the

mouth. Temperature in axilla 106°.
In the evening 103°.
11th Morning temperature 100.4°. Two
hours was sent for by the mother who
had taken temperature herself - 97°
registered over 108°
1 second thermometer in mouth registered
108.2°.
Fifteen minutes after thermometer in the
axilla registered 107° a 2 hrs after
104°.
Recovery occurred.
12th Morning temperature 102.2°.
afternoon. 104°.
From this time temperature took the
usual typhoid course.
Dr Hartshill states the case part of the
case, & makes no comments.
Case. 6.

Notes on a case of Hyperpyrexia.
by G. H. Philipson. M.D Cantab: Professor
of Medicine Univ: of Durham.
Reported in Lancet 1880. Vol. 1. p 641.
Patient A.B— aet 23 years.
A domestic servant & unmarried.
Admitted July 4th into Newcastle upon Tyne
Infirmary.
For the past three years of her life has
had hardships & difficulties having

previously been in comfortable circumstances.
Some years ago had rheumatic fever & narcotics had to be used on account of the severe pain. Great care was taken to prevent any habit being acquired. She has however taken large quantities of various narcotics &c. e.g. Sp: Camph: - Aq. Chloroformi and anything Spirituous she could get hold of, also ~~Chloroform~~ Chlorodyne She admitted having taken as much as 3v of Collis Brown's Chlorodyne at a time.
In March 1877 She was confined & had quite severe pain in left side, so severe that it sometimes caused her to faint away. It was worse on movement or exertion.
A mixture of Opium. Chlorodyne & Ammonia was taken by her, which she procured contrary to the doctors orders.
Condition on admission.
Short, with pale sallow complexion Countenance dull & heavy.
Very sensitive & excitable.
Complained of great pain in chest & back, which was intensified by touching the skin. Pain worst in

intercostal muscles, aware at night, & in morning.
Tenderness, especially in the middle of the sternal region, the left axilla & the left side of the spine. General hyperaesthesia of surface present, the sensitiveness being most marked at back & left side.
Skin gen: hot & dry.
During night sweated very much, the sweat being very acid in reaction, & something very sour & disagreeable.
Complained of great thirst & tongue was coated.
Micturition difficult, sometimes for a whole day & night no water was passed.
Urine - dark, with a copious sediment composed of urates & phosphates.
Very acid. No alb: or sugar.
Specific gravity 1030.
Bowels constipated.
Catamenia ceased the last 4 months.
Pulse 84.
Respirations 18.
Case was regarded as hysteria with amenorrhoea & intercostal neuralgia.
Treatment - Ordered to take aperi-

between blankets.
Milk diet - Comp: cin & aloes mixt. Hs.
on July 7th Evening temp. 101°
9th — 112°
10 morning 112°
10th evening 101°
12 & 13 & 14th. Temp. varied between 100° & 103°.
July. 16th ev: 111°
July 18th morning. 100. Evening 112°.
Three days after admission Sod: Salicylas was substituted. - 20 grs every four hours.
Pain continued so severe that morphia was injected. 1/4 gr. acetate.
It did good, but was discontinued.
July. 24th. Temp: in L. axilla. 117°.
R. 110°
Mouth 102°
July. 25th. Left axilla - 117.°
Right axilla 114°.
Mouth. 112°
July. 29th Left axilla. 115°
Right " 110°
Mouth 116°
Every precaution was taken to prevent deception & Special Thermometers were used.
July 21st Quinine 10 grs hs was ordered.

The sour smell after sweat became much more marked at this time.
A roseolar eruption appeared on the trunk.
The lower extremities cold. Complained of severe pains in head & all.
For several nights patient was very violent.
She became so troublesome & noisy that she was sent out. The temperature on this night before being 98°.
Remarks -
Dr Philipson draws attention to the following points.
1. The non-effect of antipyretics -
2. The non-persistent character of the temperature
3. The want of uniformity over the whole body.
4. The want of signs of general danger when the temperature was high.
— The differences in the temperature was associated with differences in the hyperaesthesia, this being generally most marked on the left side of the spine, left side of thorax & left arm.
Though the temp° was so high the mind was clear, & the patient was not feverish.
The normal ratio between pulse &

respiration never varied.
His conclusion is that the condition was the result of an influence through the vasomotor system, & that many hysterical symptoms justify me in calling it a case of hysterical neurosis.

Case 7.

Hyperpyrexia in hysteria.
Lancet. 1889. Vol. II. P. 805.
It appeared in the Centralblatt für Klinische Medicin, translated from a Danish Medical Journal. The case being under the care of Dr Lorentzen.
Patient - a nervous woman -
She had an attack of haemoptysis, which was followed by severe dyspnoea with cyanosis & temporary asphyxia. This occurred several times during the night following.
The patient lost consciousness for some time after the attack & was then described to have hallucinations & was anxious.
During next 2 months had a severe attack of haemoptysis instead of the origin of phthisis, & again a repetition of the symptoms connected with the respiratory organs took place.

There was also retention of urine.
For 3 days temp. varied between 103° & 104°.
On the 4th Day — 113°.
Patient was slightly delirious, but there were no signs of any inflammation.
In the hour temperature was 105°, & in the evening 106.3.
Next day after some paroxysms of dyspnoea temp. 113°. a one hour after 99.5°.
The next four days the temp. varied between 104.3° & 103.1°, & then became normal.
Remarks. The author considers the haemoptysis without any signs of phthisis, or any affection as haemopathic, after rise of temperature to be hysterical, as there was no organic disease the respiratory disturbance was typically hysterical.

Case. 8.
British Medical Journal. 1881.
Vol. II. P. 746.
Read before the Clinical Society. by Dr Stephen Mackenzie.
Patient. woman act 42 yrs.
Thirteen years before had an injury

to leg, which was followed by persistent ulceration. Necrosed bone had been removed & amputation had been recommended. This was done in 1878 by Mr Rivington in lower third of left thigh.

Feb. 25. 1879. Patient readmitted for painful affection of the stump, which was red & inflamed. It was thought to be erysipelatous & she was accordingly isolated.

She had some rigors, followed by pneumonia at the right base.

March 17th Temp. 108.8. Shortly minutes after 111°. & 15 minutes after that 105.8°.

March. 18th. Two thermometers placed simultaneously in the axillae showed 110.6 & 111°.

Between March 20 & April 22. many high temperatures were recorded.

Apr. 21st. Stump was opened & a piece of bone removed. After this except the day following the operation Temp° did not exceed 102°. The case took an ordinary course & she was sent out cured in August.

Pain did not at once leave the stump. & convalescence was slow.

Readmitted Oct. 21. 1879 for painful stump.
Another piece of bone was removed. The stump remained painful. Pain & distension of the abdomen was now complained of & vomiting occurred.
Dec: 31st. The patient was removed to be under Dr Mackenzie's care, on account of these symptoms, & in order to investigate the high temp:
Patient was thin, but not unhealthy looking. Abdomen distended slightly, but no tumour could be felt
Stump emphysematous looking.
Patient vomited frequently.
It was now discovered that she had taken opium for 12 years.
On Jan: 13. 1880. had a rigor & temp. found to be. 104·2. The pulse being 72 & the respirations 24.
On Jan. 14th.

at 1 p.m.	Temp.	108°
2. p.m		108·2
4 pm		107.4
5 pm		108·5
7 pm		104.6
8 pm		104.8
9 pm		102.6.

at. 11. p.m. Temp. 106.4°
12 p.m. " 113°

Jan. 15th highest temp. 113.3°
16 114.2°
17. 105.8°.
18. 112°
19. 106°.
20. 108°
21. 109.2°
22. 120.8°.

Jan. 23rd. Temp: in axilla 108°.
in mouth 98°.
in rectum 99°.

Jan. 27th Temp. 110°.

April. 5. Temp. 113°. 10 minutes after this temperature in each axilla was 99°.

April. 10th Temp: unwatched 104°.
watched. 99°

May 4th Thermometer in axilla registered 110°. when taken by nurse who watched it was Normal. Same thing repeated many times.

From May. 24th - June 3 - When she was discharged temp: remained normal. Throughout this time she remained under observation condition continued about the same, but vomiting ceased. a abdominal pain not complained of.

No important constitutional disturbance. When temp° was high pulse was between 70 & 80.
Respirations 20 – 30.
On no occasion when the temperature was watched was a high record found.
The author thinks the temperature was fictitious. on the following grounds.
1. Patient a neurotic woman, and an educated hospital patient. i.e. knew that high temperatures were important.
2. One occasion. temp° taken in mouth, axilla. & rectum, showed it to be normal in mouth & rectum, but 6° up in the axilla.
3. When 2 thermometers in one axilla, sometimes a difference of 4·5° was observed.
4. Pulse & respiration showed no correspondence with the temperature.
5. On no occasion when instrument was held in axilla & patient carefully watched, was an excessively high temperature recorded.

Case of hysterical Hyperpyrexia.
Case 9.

British Medical Journal 1887. Vol. II P. 1211.
Reported by Dr Clement at the clinical
Society of London.

Patient a Laundry maid aet. 23 yrs.
Admitted into Edinburgh Royal In-
firmary. on Oct. 22. 1883. under Dr
Brakenridge.

Complained of dizziness & pain in the
left side, & presented a purpuric rash
upon the extremities.

Nov. 29. The day after receiving a
fright from seeing a man who had lost his
eye. Temp. was 107.8°.

At midnight 3 records showed 111° -
108° - 98°.

Nov. 30. at noon - 110°.

Temperature at 4 pm. in both axillae
taken at same time Right. 108.4°
Left. 99.4°

at midnight. Right 98°
Left. 99.4°.

Dec. 1st. 6. a.m. Right - 108.4°
Left 98.8°

9. p.m. Right. 99.2°
Left. 108.6.

midnight. Right. 98.2°.
Left. 105°.

Dec. 2nd 3 p.m. Right. 97.8°
Left. 108.4°
6 a.m. Right. 107°
Left 98.4°
9 a.m. Right. 109.2°
Left. 99.2°

On Nov. 30th several short, but severe spasms occurred simulating tetanus. On Dec. 1st a peculiar & constant elevation, of the eyelids occurred, the right pupil reacted slowly to light. left nit. Strabismus present. Complained of a throbbing pain at the vertex, increased by pressure, & which was capable of rendering the pseudo-spasms mentioned above. Dec. 3rd Spasms frequent, and during their continuance, the heart sounds became muffled & doubled in rapidity, & the pulse imperceptible.

At night head was shaved, a blister applied to the vertex & she was removed to a private room.

One quarter grain of Esenin was injected hypodermically, & this appeared to soothe her.

Dec. 4th - Spasms frequent.

and there was a palpable difference between the temperature of the 2 sides.

Dec. 4 — 13th. Unconscious - Slept occasionally. At times violent. Plantar & patellar reflexes absent. There was cutaneous anaesthesia at first & incontinence of urine & faeces during greater part of time.

Dec. 5th. Tetanic spasms were increased in severity & frequency by pressure at left side of abdomen.

Dec. 13th. Conscious & bowel & bladder reflexes again controlled. She improved but on Jan: 10th. Temp. 110·8 - & immediately after 98·4°.

From this time until April 1st she improved, occasionally showed temper was sulky for 2 or 3 days, but gradually regained strength. & although emotional & excitable, was otherwise well on leaving

Remarks.

Ordinary ward thermometers were used. Sometimes by the nurse, sometimes by himself.

There were no poultices or hot-water bottles in the bed she was watched -

Case 10.

Remarks on a case with Paradoxical temperature by Dr Mahomed — Physician to the London Fever hospital. Reported in the Lancet 1881. Vol. II P. 790.

Patient. a woman aet. 22. yrs.

Admitted Sept. 30th 1878.

Excitable. vivacious, & rather hysterical woman, unmarried.

Several years ago had scarlatina. followed by general oedema.

In 1876 was under Dr Habershon for anaemia & irregular menstruation, & exhibited no unusual symptoms.

Now has phthisis, chiefly of left lung. Had had a cough for 4 months. Haemoptysis 5 days before admission. There was hectic. night sweats & pain in the left chest.

Complained often of nausea & some-times vomited — a very weak.

Temperature very variable.

Temperature during March. April & May varied between normal in the morning & 102° in the evening, sometimes 103°

From June 1st Temp: became higher. 103°. 104° · 104.8°

July. 23. Became phenomenal. Thermometer registered 106.4°.

July 25th 107.4° at 8.45 p.m.

at 10 p.m. - 110.8°.
Her respiration was then hurried, otherwise condition the same.
During rest of July & August - Temperature never less than 102°. & only 5 times above 105°.
Came under Dr Mahomed in Sept & on one occasion. Temp. in
Left axilla 102°
Right - 104°
Mouth - 107°.
128°. recorded once.
A high temp. was never recorded by a registering thermometer & a Surface thermometer gave no results.
The high temperature could be obtained at any time of day, & appeared to be under the control of the patient, who would sometimes say beforehand that the temperature would not be found to be high.
Pulse & Respiration did not increase, except sometimes the latter as if from some excitation.
The bulb of the thermometer never felt hot, & Dr Mahomed never got a temperature when he held the arm to the side.
There was other evidence of hysteria.

The patient eventually died of Scarlatina, and the p.m. revealed nothing except the phthisis.

Case 11.

Case of excessive long-maintained high temperature after spinal injury, with recovery.

Clinical Society Transactions 1875 -

Mr Teale's case —

Sept. 5: 1874. Miss G—— was riding. She was a good horsewoman. The horse a powerful hunter, fell with her at a jump & rolled 2 or 3 times over her chest as she lay on the ground, which was very rough with large stones. She got clear, rose & fell back fainting into the arms of a friend.

She was moved to a house 6 miles away. On examination it was found that left 5th & 6th ribs were fractured about the middle.

She was conscious, but collapsed & complained of great pain in the back. Area ecchymosed.

Went on alright, rather feverish for a few days. 101°. Temp: normal in a fortnight. The ribs united, but still a good deal of pain & tenderness over

the spine, especially about the 6th dorsal vertebra.

Oct: 3rd. Pain worse - Feverish again.

Consultation - thought that some subacute inflammation of the spinal ligaments excited, resulting from the injury.

All October conditions much same - temp- 100°-101°, and spinal tenderness remained. She slept badly, was depressed often occasionally jerkings & stretchings of the limbs occurred - lower limbs. She complained of feeling a tight-cord round the waist.

Leeches were applied to the spine - Ice-bags to head & spine, but temperature still rose. On Nov. 5: 103·4°

Nov. 6. 106°

Nov 7 107°.

Respiration being normal & pulse 100.

On Nov. 7th Consultation again held. After careful examination diagnosis of inflammation of the spinal ligaments, and intervertebral substances, and possibly of the membrane of the cord, but it was thought that the cord was only affected by the pressure, as power remained over the lower limbs, and the sphincters were unaffected, & also

no absolute paralysis of sensation and motion

Nov. 8th. Temperature. 110°. Leeches applied & mercurial ointment applied to the eyes.

Nov. 11th - Temp. 111.°

12 " 113.°

13. " 114°

Ordered 13th at 4. a.m & 10.30 p.m. above 122°. The pulse was 120 - small and thready.

Nov. 14th. Rapid emaciation.

Intense pain down spine & back of head, treated by morphia hypodermically.

At times could not swallow, once for 48 hrs attempt even to swallow saliva caused agony.

Nutrient enemata were given.

Ice. bag applied.

Mercury stopped, and improvement of general condition occurred. Power of swallowing returned, pulse fell to 110.

Painless micturition. Twitchings of legs less severe.

Dec. 12. Sudden severe swelling of tongue occurred, relieved by leeches.

Dec. 13. Improved now, but Temp. still between 110° & 114°.

Jan. 7 - T°. 104°.

Jan 9th. T°. 102°
Jan 10th. T°. normal.
Jan 12th. Walked about the room - slight dizzy effect beginning perceptible.
Jan 22nd. Convalescent. walked 100 yards.

Remarks -

1. Several instruments were used, & four were verified at Kew.
2. The highest T° that could be registered was 122°, but it was really higher 125°.
3. Temp generally taken in axillae. very often one in each.
The temp of left side usually ½° higher than that of right, perhaps because too weak to hold arm close to side.
4. On several occasions thermometer placed between thighs gave results generally corresponding with axilla. on 22nd Temp in ax. 113·4 & between thighs 116°.
5. Dec. 10 To in rectum 111 axilla 110·4°
6. Patient knew nothing about the temp.
7. Thermometers always examined before & results after were written down at once

8. no hot-water bottle anywhere near.

9. Sometimes when temp: high. the hands feet & forehead were very cold, & patient would say she felt as if the blood were on fire.

10. While temp: high, urine scanty & a mass of lithates, but no albumen. Pt had to be packed into hot towels, & with the greatest difficulty.

Menstruated only once since accident - on Jan. 26. 75. menstruating regularly.

11. Alternations of temperature very rapid, without apparent change in the condition of the patient, but for 7 weeks, the temp nearly below 108°.

12. Could injury of the sympathetic ganglia be a possible cause?

13 No loss of sensation -

14. Temp. generally higher on the left side.

P.S. to case.

On Feb. 5th Handkerchief 100 miles, & temp rose to 110° - again returned - this went on for sometime, but gradually improved, & On June 7th 1875 though still some tenderness about 6th dorsal vertebra, she can walk quite well on the level, ascend stairs with aid of the bannisters.

Mr Jonathan Hutchinson makes some interesting remarks on his Teale's case (Lancet 1875. Vol. I P. 340)
He thinks that there is an essential difference between these cases of abnormal temperature following lesions of nerve centres, & those which form part of a specific fever. He concludes that in cases of injury to the cervical cord, there are 2 classes of opposite facts, in the one set a very low temp: occurring, in the other a very high.
On P. 343 He says that such cases point to the existence of a heat controlling centre, or centres in the cord.

Case. 12.
Hysterical pyrexia.
Clinical society's transactions Vol. XIX.
P. 124. by Dr Hale White —
Read Feb: 12: 1886.
Esther N—— aet: 18 years —
Machining assistant at a confectioners
admitted under Pye. Smith Jan
Aug: 15th 1885.
On admission. Feverish with pains
in the abdomen & diarrhoea.
Had had constipation for 14 days,
a purgative caused the diarrhoea

She has had some pain in the right iliac region, but no sickness.
Family & Personal history good.
Soft systolic functional murmur - No abdominal disturbance.
Pain in left iliac region.
Splenic dullness slightly increased.
Temperature 104°.
Pulse. 112.
At 6 p.m. 3 hours after admission temp- 104.6° Pulse 120. Resp: 36.
Aug: 11th - 9.a.m Temp. 104.6°.
Cold sponging reduced it to 102° -
1 hour after 103.2° and at 6 p.m. 105°,-
which was again reduced by sponging.
Complains of headache & pain in right iliac region.

Aug:	12th	Temp: morning	102° Ev: 103.6°
	13th		99.2° 102°
	14th		98° 99.2°

at 6 p.m. bowels acted. & felt better after. Was sick twice in the night. She went out after this.
Sept. 9th. was readmitted.
Mother said that after going home she was quite well but weak. She went to work on Sept. 8 and was seized with a severe pain in the left side & she was carried to her parents.

on Sept 9th managed to walk up to the hospital with her mother's help.
Condition on readmission.
Face flushed skin hot & dry.
Frontal headache.
The abdomen retracted, but no abnormal resistance anywhere.
No glands enlarged in the groin.
Complains of pain & tenderness in left side, midway between nib & crest of ilium, also tenderness on pressure in epigastrium.
Generally lies on right side.
It was found that the site of the pain varied continually & by distracting her attention, & painful place could be examined without any sign on her part.
Urine contained a trace of albumen, and an occ. pus cells, probably from slight vaginal discharge which was present.
Temperature 103°.
All organs were found healthy.
Sept. 10th at 2.45 p.m. Temp. 105°
at 10 p.m. 99°
Sept 11th. No pain, but abdominal tenderness on pressure, & vomited greenish matter during the night.

Urine as before - Urea. 1.8%.
Temperature 6.a.m. 98.6°. 6 p.m. 104°.
Sept. 12th no tenderness in loin.
tenderness in epigastrium.
6 p.m. temp: 102.2. 10 p.m. 98.8.
Sept. 13th. No vomiting - tenderness or headache. Temperature down to normal.
From this date it remained normal.
And patient had no further pain or tenderness.
Dr Hale. Will then remarks on the case -
Why was the case hysterical? -
The character of the pain markedly so.
No objective cause whatever could be discovered.
Abdomen was very relaxed & the parietes so thin, that if any enlargement had existed could not possibly have escaped detection, also if any inflammatory trouble there would of necessity have been some tenderness of the organ affected.
Concludes by a process of exclusion that temperature was hysterical.
To prove evidence he puts forward the following arguments.
1. The erratic character of the temperature.

2. Patient otherwise hysterical.
3. Age & sex, all recorded cases being in girls, and about the age at which hysteria is most common.
4. Nothing in the patient's condition militate against the view that the paresis was hysterical

Dr Hale-White then makes some very interesting & important remarks — which I will quote in his own words.
"So little is hysterical paresis recognized, that a good deal of scepticism exists as to its existence. Due to a mistaken notion that in hysteria only those functions over which the will has some control can be affected, and also to the fact that it is not sufficiently recognized that not only is the regulation of the loss of heat by the nerves of the vaso-motor nerves under the influence of the nervous system, but that thermogenesis itself is directly controlled by nerves which having their origin in the cerebral hemispheres proceed to the muscles. Bearing in mind the fact that it is not necessary that the will should have any control over a function which is hysterically deranged,

and also that the nervous system regulates the heat of the body, there is no reason why hysterical pyrexia should not exist. It is a nervous disorder in which that part of the nervous system, which presides over the temperature of the body, is deranged"

"A hysterical patient has a mad calorific area"

"If there are secondary heat centres lower down in the cord, there may also be affected in hysteria c.f. vaso-motor paralysis in hysteria, which is just a step, also the phenomena of haematidrosis.

'Paradoxical temperature'.

Case. 13.

Lancet 1879. vol. I. P. 868.

by Julius Caesar. L.R.C.P.Ed.

Amelia — aet 15 years.

Seen Oct: 21. 1878. had been ill a week, now presented well-marked symptoms of enteric a

Temp. morning 102.4°. evening 104.6°.

For the next 18 days varied between a morning maximum of 102.4° & minimum of 98.6 & an evening max of 105.2 & min: of 102.6

Nov. 9th. Basic pneumonia diagnosed. For 7 days temp: varied between a maximum morning T° of 101° & min: of 99°, & max: evening 104° & min: 100°.

Nov 17th. Temp. morning 97°. ev: 101°

Nov 18th. Nursing staff to take T°s of the thermometer, which was incorrect by 110° & registered 113°.

At 3 p.m. same day. T° 101°.

6 p.m. 100°

at 11 p.m 102°

Nov. 19th Morning temp: 109·2°

Evening 100·6°

at 11 p.m. —— 104°

Nov. 20th Morning 104°

Evening 102°.

Nov. 21. Morning 108·2°

Evening 102°

Nov. 23. Morning 100°

Evening 100°

Nov 24 Morning 100°

Evening. 106°

After this no high temperature occurred; & a complete recovery was made.

Remarks — Observations were made with 2 thermometers, & patient in a cot in each instance when temperature was taken.

The occurrence of bed-sores is mentioned merely. No particular reference made.

'Hysterical Fever'

Case 14.

Lancet May 15th 1886.

by Dr Débove to the Société Médicale des Hôpitaux.

Patient hysterical.

In Nov: 1885 Elevation of temperature continuously occurred.

39.5° C. was recorded in axilla night & morning.

During Dec: 40° C.

at the end of the month 41° C.

Jan 1 — 24th always abov 41° C.

Jan. 24th normal

No visceral lesion could be discovered.

A hysterical attack always came on about 7 p.m. lasting till 1. a.m.

The most curious point was the slight difference between the morning & evening temperatures.

After 3 months of 'hyperthermia', Convalescence was complete & rapid.

Case. 15.

Dr Greig. Smith. Lancet 1878. Vol. 1. P. 578

Patient a milliner aet: 19.

Temp. of 108° occurred & in

few minutes found to be 99°.
She had symptoms of gastric ulcer, subsequently
the treatment by enemata the pyrexia
developed. It went on for 1 month
after treatment by Quinine - Cod bath &
Roberts' coil had no effect.
Every precaution was taken to prevent fraud.

Case. 16

Dr Cheadle in Lancet for 1878. Vol. II
Nov. 9th reports a case of
a Female aet 18 yrs convalescent
from typhoid when temperature was
over 111° - & once when taken by
Dr Cheadle himself it was 108.6°.

Case 17.

British Medical Journal 1880 Vol II. P. 517.
Dr Little of Dublin -
In this case a temp. of 133.6° was
registered by a specially prepared thermometer, registered at Kew —

Case 18.

Pneumonia with paradoxical temperature
British Medical Journal 1884 Vol. I P. 371.
Dr C. F. Knight - at Medical Section of

The Academy of Medicine in Ireland.
Woman aet. 33 yrs - Temperature
of 114° & 127° were recorded, but
found to be fictitious. The patient
kept a piece of flint coming out of
hot water under her pillow.

Case.

This is the last case I shall quote.

Guy's Hospital Reports Vol 50. 1893 -

P. 568. - under Dr Moxon -

The patient a female aet 22 years.

Admitted Sept 30th 1878 for haemoptysis.

History. Father died of spinal Disease.

Seven years ago had scarlet fever followed by swelling of the legs, which soon subsided.

Four months ago caught cold, and Sept. 24th had slight haemoptysis.

On admission. Patient anaemic. Skin hot & moist.

Appetite bad.

Impaired resonance at left apex with bronchial breathing.

Pulse 92. Soft & regular.

Heart. Sounds normal.

Urine. Sp: gravity 1030.

No albumen or sugar.

Nov. 16. Bronchial breathing at right apex.

May 5. 1879 - Pleuritic rub on left side posteriorly heard.

July 15th. Evening Temp: 108.8° & nothing to account for it.

July 25th Temp: at 8.45 p.m. 107.4°.

at 10 p.m. 110.8°

Some dyspepsia, otherwise Comfortable

Observations on this temperature were made early in September before Dr Taylor & several assistants.

Three thermometers were used simultaneously, one in mouth, two others in axillae. Following temperatures found.

In mouth- 107°

In one axilla 114°

In other. 102°

On changing thermometers the highest temperature was recorded in the opposite axilla.

With surface thermometers no result was obtained.

The house physician said that he never obtained a very high temperature if he held the instrument himself.

She would never confess to any deception.

No nurse in the room was present.

This went on until March 1880, when patient got worse & died on the 21st. Phthisis was found at the P.M.

The ward-clerk in this case notes that the highest temp. was always on left side, & that the skin here was unpleasantly hot to the touch, which was not so elsewhere.

with these cases - my own & the extracts from the cases that have been from time to time being reported in the Medical Journals. I think it can be proved that the high temperatures, whatever these cases may be, are genuine. Considering my own part I would draw attention to the following points, which, in my opinion, are quite sufficient enough that the case is a genuine one.

1. The patient was a young lady, who was not by any means an educated hospital patient in the sense that Dr Mackenzie mentions. & she was quite unaware, at the outset, at all events, of the importance attached by physicians to the conditions of the temperature, & was ignorant that her temperature was peculiar in any way.

2. There were no hot bottles or poultices near & as the patient was never left alone for an instant night or day. When she was ill, she could hardly have provided herself with means to affect the mercury, unknown to the person in attendance upon her.

3. I took myself on all occasions pre-

cautions. I always took the temperature myself as there was no trained nurse in attendance. This circumstance of the patient not being good.

4. Used 2 thermometers. One was tested at Kew & the other I had made especially for me.

5. On all occasions when the temperature was high, a marked increase in the pulse rate & the respirations was observed.

6. The patient exhibited all the signs of pyrexia - Scanty, high coloured urine, deposits, cracks. Tongue became thickly coated, & a slight Pulse & Respirations always increased.

Constipation too became more aggravated.

These points are I think sufficient evidence of the genuiness of the case -

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With regard to the Case being one of hysteria, there is ample evidence -

The patients family history, which is very neurotic.

According to my predecessor Dr B —

the patient used to rub acetic acid on the malar region, in order to produce the appearance of a hectic flush. This I was never able to prove.

She exhibited the craving for sympathy which is so marked a feature of hysterical cases.

The scene described in the account of the case, when she thought she was dying, was also quite in accordance with this view.

The contraction of the leg that she suffered from was in all probability hysterical, as there was no history of injury, disease, or misplacement in it.

In short you had only to be with the patient a short time, to recognise that she was a typically hysterical girl.

—

If we examine the other cases that I have given notes of we shall find that, with one or two exceptions, they occurred in hysterical patients. All occurred in females & the majority between the ages of 18 & 25, a time when hysterical manifestations are apt to occur.

It is interesting to note that in nearly all the cases attention is drawn to the same 4 points viz.

1. The non-effect of antipyretic remedies.
2. Evanescent character of the temperature.
3. The want of uniformity. The temperature being different in different parts of the body.
4. The absence of urgent symptoms, and in no case did the case end fatally save the high temperature.

With regard to the 4th point my case was an exception, as the general symptoms were always urgent, when the temperature was high.

With regard to point 1. In my case I was inclined to attribute the fall in temperature which occurred, as due to the antipyretic measures which I employed, but by the light of further experience, I think that this was not the case.

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I think I need not say more about the genuineness of the cases, as in each case I have mentioned that particular care was taken

to obviate any source of fallacy. a many of the cases are reported by well-known physicians whose detective faculties must have been sharpened by long experience, & the accuracy of whose observations it would be juvenile to doubt.

There is no doubt that the tendency has been to question the truth of these cases e.g. in Dr Foggi's work on medicine 2d. 1891. Pp. 31-2. The author adopts a very sceptical tone, & says. "In these cases of abnormally high temperature, the pulse & respiration did not rise in any like proportion, there was no delirium, a febrile condition of the urine, & the patient did not die."

My own case, apart from several others of those reported, is a complete respiration, with the single exception of the patient dying, but this is not at all a necessary sequel to paradoxical temperature.

To quote further from the same author on P. 41. at the bottom of the page he summarises the well-known phenomena of the febrile state & those as we have seen were all present in my case.

Among the cases reported by me I have quoted 2 that were found to be spurious & this I have purposely done, to show how it was done, & to point out, that in all subsequent cases at least, a repetition would have been impossible.

The 2 cases were No 8 & No 18.

In No 8 - the case was never found but the points mentioned on p. 49. of this paper are enough to show that the temperature could not have been genuine, & it will be seen that all the other cases bear comparison with this one.

In No. 18. the case was discovered as mentioned p. 69.

—: Having, to the best of my ability, established the genuineness of my own cases & those reported, my next object is to try and furnish some explanation of the occurrence of these high temperatures.

The first thing to be done is to prove the existence of a mechanism which controls the bodily heat & then to explain how it may become disordered.

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There is both experimental & clinical evidence to show that in the brain, & also the cord, centres exist which have for their function the control of the body-heat. What their precise action is, is still a matter of conjecture & has formed the subject of many theories. The most reasonable of which from my point of view, is that of Dr Ward Cheadle, but to this I shall refer later on.

First with regard to the brain Experiments have been performed by many observers & in many Countries, proving the existence of what are termed heat centres in the brain. I will very briefly refer to those performed by Dr Hale-White - an account of which appears in the British Medical Journal for 1889. Vol: I. P. 1401. et sequitur.

He performed a series of experiments using rabbits in all cases & his conclusions are as follows.

- First it is necessary to state that the normal temperature of a rabbit varies between 101° & 103°.

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1. In 14. lesions of the white matter only was caused, & the following is an analysis of the 14.
In 8 Temp: went over 103°.
In 4 out of the 8 the lesion just touched the corpus striatum, though it was mainly in the white matter.
Of the other 4. one developed cerebral abscess, & the 3 others had a temp: of 103·4° which might easily have been due to the combined influence of the operation & the anaesthetic.
He concludes therefore that lesions of the white matter do not produce a rise of temperature, unless they touch the grey matter of the central ganglia, when a slight rise may occur.
2. Lesions of Corpus Striatum.
In 23. This was the part that was principally destroyed by the operation.
In 2 of these Temp: over 106·8° or. caused.
In 7. Temp: of 106° or over.
In 11. over. 105°
In 18 Temp: 104° or over.
In remaining 5. a rise occurred in 3. & at all in 2. In one of the 2. the temp: was 0·2° less than 6. for the operation, but for this we

cases could be ascertained. In that of this 2 : it was 0·4°. lower, but the lesion was very extensive, & the condition was probably due to shock.

Only a few hours usually passed between the operation & occurrence of the highest temperature. C. G. In 4 hrs. temp of 106·8° occurred. In 3½ hrs. in another case.

The duration of the rise averaged 58 hours - sometimes a second rise occurred late in the experiment & this was in every case found to be due to a secondary haemorrhage in the corpus striatum. Occasionally a fall occurred, & this was invariably found to be due to the shock caused by a large secondary haemorrhage having taken place.

3. Lesions of the Optic Thalamus. Occurred in 9 rabbits. & in all a rise of temperature occurred

In one. 105·6°
In one. 105·5°
In all but one 1°. over 104°, & in this one the lesion was very superficial.

The rise was not so marked, as in the case of injury to the corpus Striatum. The average height was attained in 6-7 hrs, & the average duration was 42 hours.

These experiments show conclusively that there are ~~higher~~ centres in the brain, which have an influence upon the body temperature, & this quite apart from any vaso-motor changes —

So much for experimental evidence, & next I will mention several cases, which confirm these experiments.

Lancet 1889. Vol. I. P. 1295 et seq

W Hale White reports several cases, which show the influence of the corpora Striata & optic Thalami upon the body temperature.

Case. 1.

Bilateral softening of both corpora Striata.

Patient aet. 57. Eng. a man.

On admission. Speech slow. The muscles, especially of the legs, exhibit considerable paresis.

For 7 weeks temp°. never over 98·4°

On April. 5th — whilst at dinner, he

fell off. She said he was not unconscious. She became so after being put to bed & the temperature rose to 102·4°. She died in 5 days & the temperature was raised all the time.

P. M. examination.

Arteries atheromatous.

Two patches of softening were found. On the right side of the brain. 1 inch long from before backwards, & occupying the posterior portion of the internal capsule, not quite so far forward as the knee. The 2nd on the left side, affecting the genu & the posterior limb.

Both patches extended for a short distance into the corpora striata & optic thalami.

—

Case. 2.

Softening of corpus striatum in a man aet 56 yrs.

Had complained of numbness in left arm shortly before admission, & fell down a few minutes after.

On admission. Conscious. but complete paralysis of left arm, leg & face except forehead.

Ptosis of left eyelid.

Tongue pointed to the right. also the head & eyes turned to right.
Complete hemianaesthesia of left side of head & trunk, & left upper & lower extremities, except a small spot over the outer side of the ankle.
Left conjunctival insensitive.
Left side - deafness.
Left homonymous hemianopsia.
Taste & smell normal.
No colour blindness.
For the first 9 days temperature on paralysed side from 0·2° — 2·2°. higher than on sound side.
On 4th day 100°, & became same as other side on 9th day.
Died in 5 weeks of oedema of the lungs.
P. M. examination.
Cortex softened on right side, but not any portion that has by experiment been found to have any influence on the temperature.
An infarct of brain on right side; a patch extending from the level of the corpus callosum to grey matter of base, & laterally from the claustrum to the outer surface of the caudate nucleus & of the

thalamus, which were both somewhat softened.
Autops. particularly it excluded from the front of the internal capsule, nearly to its posterior extremity.
The temperature as shown in the chart given on P. 1296. shows a difference on the 2 sides, always, even when not raised.
This is opposed to the view that at first the temperature is highest on the side opposite to the lesion, and that it soon became the same on both sides.
Case. 3.
In this case a temperature of 106.6 was recorded, & a symmetrical patch of softening was found in Each corpus Striatum.
Case. 4 -
Hugh temperature in depressed fracture - under Mr Page in the Middlesex Hospital.
Lancet. 1887. Vol. II - P. 1206.
In this case Mr Page says.
"The case is deserving of record, as an instance of disturbance in the central Equilibrium manifesting itself by elevation of the

temperature. There was nothing in the wound to account for the rise. The membranes were healthy, and so were the convolutions beneath. The depression of bone was insufficient to injure the subjacent structures, but it was sufficient to upset the equilibrium of the heat mechanism".

Mr Page then says that this case fits in very well with Dr Macalister's theories as expressed in his Gulstonian lectures.

The following is a brief account of the case.

On Dec. 31st Patient a man aet: 36 yrs, addicted to drink, fell against a scraper. He was unconscious a moment, then got up and walked to hospital.

He had a jagged & bruised semilunar wound, 1 inch long, in the right occipito-parietal region, & a fracture was felt with very slight depression. In the absence of any cerebral or even symptoms of any sort, the wound was merely cleaned & dressed, this at 6 p.m. At 11 p.m. Temp: 101·2°. Jan 1st. Morning 104°.

The patient being drowsy & apathetic.
The pulse was 70.
She was quite comfortable, asked for food & was in no pain.
The wound was again carefully examined, dressed again & cleaned - the parts not being Strapped or sutured.
In afternoon Temp: 105°- falling in the evening. and on
Jan. 2. Temp: 99.4°
Jan 3. 10.a.m. 99° - No pain - Lay in same state, which was ascertained to be her habitual one.
afternoon - Temp: again rising.
at 6.p.m. 102°
at 10 p.m. 103.6°
Jan 4 at 2.a.m. 104°. Very drowsy, but in no pain.
Operation was now decided on, & it was found that there was a V-Shaped fracture. the apex being most depressed & wedged, it had to be Sawn off. The opening was entirely in the parietal bone, and Situated over the temporo-sphenoidal lobe.
Dura mater unirjured & healthy.
After the operation at 10 p.m. 107.2°

Jan. 5. at 2. a.m. Temp: 104°. a
then fell to 100° for the rest of the
day. with one slight exception
nis occurred after this.
There were no symptoms, motor or
sensory, of brain lesion.
The optic discs normal.
Colour vision & field normal.
—: This case is a very interesting
one & clinically speaking is very
strong evidence in favour of the
existence of a heat controlling
mechanism.

. ——— .

I do not propose to enter fully in the
question of heat centres in the cord.
If they exist, they are probably
subordinate ones, & my object
is only to prove the existence of
them in the brain, or having a
bearing on my case. However I
have quoted a case of Mr Teale's
(see P. 55. of my note.
This case proves very strong evidence
of the existence of some controlling
mechanism in the cord.
Mr Jonathan Hutchinson in the
Lancet 1875 Vol. I P. 340 &c.
marks on this case & says

that in his opinion such cases point to the existence of a heat-controlling centre a centres in the cord.
on P. 748. He gives it as his conclusion that the temperature in injury to the cord is dependent on vaso-motor paralysis & he asserts that in cases when the heart beats strongly it will always be found that the temperature is raised, the heart-actions in such cases being vigorous & the pulse throbbing. Whereas when the heart-action is slow & feeble the temp: is low: Observers differ very much & it would involve a much greater expenditure of time & labour than I can spare to go into this.

With these data & go upon I will in conclusion try & explain how paradoxical temperatures occur & I must say a few words on the Nature of Fever. The theories on this subject are numerous, but the most feasible are appears to me to be that of Dr Donald Macalister. His Gulstonian Lectures on the Nature of Fever* (1887) are most suggestive & he points out that high temperature

* British Medical Journal - 1887. Vol. 1. P. 566

does not necessarily mean fever, and vice-versâ there may be a 'febris sine febre', a morbid thermogenesis without high temperature, the increased heat production being compensated or more than compensated by increased heat-loss.

The substance of his theory amounts to this. There are 3 mechanisms at work.

1. Thermotaxis. This is the power that regulates the balance of production & loss.

2. Thermolysis or anabolic.

3. Thermogenetic or katabolic.

To quote his own words

"It is excessive thermogenesis, with excessive katabolism of nitrogenous tissue, which that involves, that constitutes fever, without that even temperature may rise for a time to a paradoxical height, to a point at which we may expect albumen to coagulate, & yet the patient may recover promptly, for there has been no excessive combustion, no consuming of the tissues."

He says that a certain order is observable in the disturbance of the thermal relations of the body.

1. The most easily disturbed is the

thermotaxic mechanism - this results in strange risings & fallings of the temperature, according as the independent variations of production & loss are concurrent or the reverse; but these need be no fever. The balanced rhythm of anabolism & katabolism in which the muscles is not disturbed; there is no excess in oxidation & no excess in inhibition. This condition becomes thermal ataxia.

2. There are in addition disorders of the parts of the nervous mechanism heat-production. viz. undue action of anabolic nerves with diminished constriction & diminished absorption of energy, & over-action of the catabolic nerves with increased oxidation & thermogenesis - the thermogenetic mechanism gets ahead of the thermolytic apyrexia results, but if the thermolytic get disordered then severe pyrexia and hyperpyrexia develops.

By this theory every form of pyrexia is easily explained the paradoxical temperature without febrile symptoms, the paradoxical temperature with, as in my case most especially.

Dr Macalister mentions the instability of the child's temperature as corroborative evidence of the truth of this theory. This is due to the thermotaxic mechanism not being developed. It is the most delicate part of the mechanism & the last to develope.

Without going fully into the subject I may just remark that experimental evidence is also in favour of Dr Macalister's views.

Experiments go to prove that by the stimulation of a particular region in the inner side of the corpus striatum the thermogenic function of the muscles is abnormally increased & therewith their katabolic or oxidative metabolism. This without encroaching upon the motor track, without exciting the motor function, & without any vaso-motor action coming into play. These experiments are those of Aronsohn & Sachs of Berlin.

Professor Wood has shown that increased production of heat is caused in a dog, by destruction of a cortical area, just posterior to the crucial sulcus.

Without saying that the matter

is proved, we can go the length of saying that theoretical & experimental evidence is in favour of the existence not merely of heat-controlling centres, but of separate anabolic & katabolic ones. Or we may say thermolytic & thermogenetic ones.

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Having proved the genuineness of paradoxical temperatures, & endeavoured to establish the proof of the existence of heat centres in the brain & probably also the cord, it only remains for me to suggest that as in them cases a hysterical derangement of the heat-controlling centres occurs, producing of course effects varying with the particular centre affected, the degree of its affection & the condition of the patient apart from this. Many hysterical manifestations are just as extraordinary, but better known, & not therefore thought so much of. E.g. I have seen the respiratory centre affected in hysteria so that respiration was so rapid as to be uncountable. Utter went for days at a time. The term "Mad Catalepsis area" is to my mind a very apt one, & is equally applicable to other hysterical manifestations

One might multiply examples of the same kind, but once granted the fact that in hysteria derangements of mechanisms occur, which are quite outside the power of the will, the fact of the temperature becoming disordered is not more surprising than the disorder of any other mechanism - the vaso-motor, cardiac etc. One only wonders is that there are not more cases of the kind reported - that they occur I feel quite sure, but they have to be looked for.