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Thesis For M.D. Degree.

Some Observations Upon
The Uterus And Its Appendages
In The Insane.

By
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M. B. & C. Co.

1896.



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Whilst it is the object of this Thesis to deal with the subject in the main as limited by the title, it is well that some consideration be given to the general literature bearing upon the relation between diseased conditions of the Uterus and Appendages and diseased conditions of the Mind.

It has long been held that a decided relation does exist between pathological conditions of the sexual apparatus in women and Insanity. So far indeed has this been carried beyond the limits of sound judgement that certain writers have ventured to propose excision of certain portions of the genital organs as a remedy for morbid conditions of the Brain: one such instance of this literature is a pamphlet by D^r J. B. Brown published in 1866

recommending "Clitoridectomy" a Cure
 "for certain Forms of Insanity". In many
 instances it might appear as rational in
 view of the great advance in Brain Surgery,
 to excise certain portions of that organ, which
 are believed to have a relation to the sexual
 apparatus for morbid conditions of the latter.
 It has to be said however that the operative
 removal of the Ovaries & Tubes on both sides
 produces in many cases, a distinctive
 altered mental states, as much a sequel
 to the operative procedure as is the altered
 mental condition following removal of the
 Thyroid Gland. Albeit the train of
 symptoms following the two operations
 presents little, if any, analogy and so
 far as is at present known they afford
 different fields of speculation as to their
 cause.

Such publications as the one above
 referred to have in no way checked sound
 clinical & other observations which go to

establishes the relation between sexual and mental Pathology. Going so far back as 1819 we find that D. Robert Goode in his observations on Puerperal Insanity dwells ably on the relation of organic derangements of the Uterus to Insanity. Drs. C & F. Fox in the Report of Bristolington House for 1864 assert that Masturbation which may be dependent in many instances on a sexually pathological condition, may be in turn a cause of Insanity and not only a symptom of an unsound mental condition.

In 1869 D. Louis Mayer in his —
 "Die Beziehungen der Krankhaften Zustände
und Vorgänge in den Sexualorganen"
"des Weibes Zu Geistesstörungen" comments on the altered mental condition during Pregnancy, menstrual onset, & Menopause, Amenorrhoea, Uterine congestion, Vaginismus & other sensitive conditions of the external genitals, Pruritus vulvae, Dyspareunia, Conditions of Tumours,

of Sexual Organs, Prolapsus Uteri, Chronic Endo-Metritis, Cancer of Cervix & Mal-positions of the Uterus. These in cases cited he relates to Hysteria, Somnambulism, Folie Circulaire, Erotic Mania, Melancholia Hypochondriasis etc.

Pozzi in his Gynaecology 1891 says-

"It is certain that any genital disease in a woman predisposed to Hysteria will produce a development of that neurosis.

D. G. R. Shepherd in the "Yale Medical Journal" 1894-95 contributes an article "on Uterine Mal-positions & Disease as a Cause of Insanity."

And H. A. Tomlinson in 1893 in "The Association of Visceral Disease with Insanity" also deals though not so directly with the subject under consideration.

Such is a short summary of the comparatively less-well-known literature on the subject. Amongst the larger general treatises on The

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Diseases of Women. D. J. C. Skene of New York devotes a chapter to "Gynecology as Related to Insanity in Women". He states that Insanity is often caused by disease of the procreative organs; that an acute disease of the Ovary or Uterus or displacement of either is sufficient to cause mental derangement which will subside when the disease of the pelvic organs is relieved; that there is indeed amongst women a distinct class of insane cases where the aetiology must be studied from the point of view of diseased sexual organs. The derangement in such cases may be functional, or, with less hopeful prognosis, organic.

Amongst general considerations he remarks upon the difficulties to be encountered in this field of observations mentioning amongst others the comparatively little help obtained by reference to the Case-Books of the larger Asylums.

It would appear that this must be the case for some time & coming more particularly to the subject matter of the Thesis, it has been deemed well to place on record a series of cases the insane condition of which being first summarized, full consideration is then given to the Macroscopic & Microscopic post-mortem appearances of the Uterus and its Adnexa.

Thereafter is appended a summary of those points which would appear to be the more important in regard to (A) the Gynecology of the Insane, (B) General Gynecology.

Series of Cases.

I. S. R. H. act. 62. Widow. Has had three children.

Chronic Mania of several years duration, very excitable & troublesome & delusional.

P. M. Naked Eye Appearances.

(1) R. Appendages Tube = $3\frac{1}{2}$ in - normal
 meso-Salpinx - normal - Parovarium very indistinct. One small simple Broad Ligament Cyst.

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projecting posteriorly.

R. Ovary: Atrophied 1 in \times $\frac{3}{8}$. Tissue pale in section & in an atrophied follicle there is a dark-stained detachable lining membrane.

(2) Left Appendages

Tube = 4 in - normal

Meso-Salpinx normal - Perovarium very indistinct two minute simple Broad Ligament Cysts projecting posteriorly also one projecting anteriorly = marble size - contained straw-coloured albuminous fluid.

Ovary: Atrophied $1\frac{1}{2}$ in \times $\frac{1}{2}$ in. indistinct traces of Graffian Follicles. Tissue pale.

(3) Uterus. External measurement 2 in \times 2.

Some atrophic changes marked - small fibro-myomatous nodule = pea size on the middle of Posterior Wall.

Microscopic Appearances.

Ovary \times 90. Tunica Albuginea thick no ova near surface. Follicles are crowded irregularly here & there and

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what appears to be dense fibrous tissue surrounds them.

X 690 = vessel walls thickened many of them have their lumens obliterated.

Uterus X 90. Large thick-walled vascular spaces seen & the atrophied remains of utricular glands. Vessel walls generally are thickened. X 690. Glandular Epithelium is small. Fibrous Tissue seen in excess in the vessel walls.

II. A. S. age 33. no occupation - single.

Predisposing Cause = Heredity, Exciting = Alcohol
Father & two sisters died of Drunk.

Admitted 3 Dec 95 - Died 10 Jan 96.

Mania à Potu. Heard voices etc. Feble very restless, noisy & sleepless: dirty & destructive in habits. Had deep Corneal ulcerations & conjunctivitis.

Post-mortem Thin poorly-nourished
oedema of Fine Brain Membranes, Lateral Ventricles dilated. Liver fibroid = 60 oz.

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Numerous Gall-stones - Kidneys congested
Some congestion of the External Os.

(1). R. Appendages.

Tube = 4 in. normal.

Meso. Salpinx - Paramesonephros fairly well defined

Ovary - $1\frac{3}{8}$ in X 1. on section well-defined
marginal follicles. Stroma appears somewhat
haemorrhagic. on section Black Pigmented Scar.

(2). L. Appendages.

Tube = 5 in - normal. Paramesonephros small but distinct

Ovary. Replaced by an Unilocular Cyst
of large orange size & shape containing
clear straw-coloured fluid. Cyst has

a smooth lining & its walls are thicker
towards the hilar portion, traces of Ovarian

Tissue being recognized here - No superficial
adhesion sites.

(3). Uterus Internally $2\frac{1}{2}$ in X 2. mucosa smooth
Shows some black pigment near the orifices
of Fallopian Tubes.

Microscopic Appearances.

Ovary X 90. Tunica Albuginea indense

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there are many blood filled follicles, irregularly accumulated. There are many also which are not blood-filled but these of any size are irregular in shape. Very few of the follicles contain healthy ova. There are also seen large stromal ecchymoses.

X 690 Whilst the Albuginea is dense there is no marked tendency to the formation of fibrous tissue. Round the follicles blood vessel walls are well marked.

Uterus X 90. Vessel walls are seen to contain a considerable amount of muscular tissue.

Cyst Wall X 90. Composed mainly of wavy bundles of fibrous tissue. There is considerable differentiation into layers: one or two large blood vessels are seen.

X 690 There is also some muscular tissue in the wall. the epithelial lining on the inner surface of the wall is not distinctly seen.

III. A. G. art 22. Single. Servant.

Suffering from Mania passing into Dementia

~~Had Syphilis~~ Had Syphilis.

Post-mortem Naked Eye Appearances.

(1). R. Appendages

Tube = 4 in - small, fimbriated end much congested.

Meso-Salpinx - Veins congested - Paramarium indistinct.

Ovary - elongated though small = $1\frac{1}{4}$ in \times $\frac{1}{2}$ in

Superficially pale & smooth - on section a few small follicles seen - Stroma haemorrhagic.

(2). L. Appendages.

Tube = $3\frac{1}{2}$ in - no fimbrial congestions.

Meso-Salpinx - Veins less congested Paramarium distinct.

Ovary - $1\frac{1}{4} \times \frac{5}{8}$. smooth & pale superficially.

on section considerably paler than R. Ovary.

(3). Uterus, $2\frac{1}{4} \times 1\frac{3}{4}$ externally. on section

Arbor Vitae well-marked. Mucosa of Corpus smooth & non haemorrhagic.

Microscopic Appearances.

R. Tube (Ampulla) $\times 90$. walls thickened

Bl. Vessels much engorged. many ecchymoses

Mucosa irregular & imperfect.

$\times 690$. Mucosal folds show marked

leucocytosis. columnar ciliated epithelium

is retained over many of them. Irregular-shaped

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cells are seen in the lumen between the folds.

R. Ovary x 90. no large follicles are seen near the surface, there are many at the deeper levels. vessels are numerous & engorged & there is some stromal ecchymosis.

x 690. many of the young follicles are perfectly formed, some of the older ones are represented by blood-filled spaces.

Uterus x 90 walls appear normal, the mucosa is irregular.

x 690. Cutaneous changes are seen in the uterine glands.

IV. A. P. act 79. Suffering from Chronic Mania duration 30 years. married & had a family. Post-Mortem. naked eye appearances.

(1). R. Appendages

Tube = 3 in. Fimbriae attenuated, tube slightly thickened at mid-portion. Ovarian Fimbriae tense & thickened.

Meso-Salpinx: from the anterior surface close to hilum of Ovary there springs a glove-finger shaped cyst $1\frac{1}{4}$ in long by $\frac{1}{4}$ in wide. There is fat

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in the composition of its walls; near the extremity it contains turbid yellow, watery fluid. Parovarium very faint in outline. Ovarian Sac well marked.

Ovary - size normal, irregular modulated surface due to projection of small cysts. On section the tissue is seen to be almost wholly cystic. The cysts are from shot to pea size and contain yellow, viscid material.

L. Appendages.

Tube: $4\frac{1}{2}$ in normal.

Meso. Salpinx - Healthy. Parovarial outlines very faint.

Ovary. irregularly rounded in shape $1\frac{1}{2}$ in surface is irregularly modulated as on opposite side. On section the organ is wholly cystic except in its upper outer third where there is a densely calcified corpus luteum of marble size. Contents of Cysts are straw-coloured watery fluid.

Uterus. Senile changes. On section a turbid yellow watery fluid is seen in small quantity

in cavity of uterus itself. In its mucosa the mouths of the glands are well seen and a similar fluid is expressible from them. The Cervical Canal is blocked by an abundant muco-purulent secretion like white of egg.

Microscopic Characters of fluids of Uterine cavity
 proper - epithelial cells in various stages of fatty degeneration - no mucous globules.

Secretion of Cervical Canal - mucous globules pus cells, epithelial cells in various stages of fatty degeneration.

The OS Internum is very narrow, the Cervical Canal is much widened & seemingly excavated by some process which has produced the muco-pus described (See microscopic section of cervix).

Microscopic Appearances.

R. Tube x 90. Muscular & Fibrous factors of the wall thickened. Mucosal plicae simplified.

x 690. Epithelium of Mucosa is shed in many parts. Leucocytosis is at parts marked. Many of the crypts are.

full of small closely-packed irregularly-shaped cells.

Uterine Corpus x90. Glands not well seen.

x690 proliferation of connective tissue of the wall also the cellular structure of the glands is not well seen in this specimen.

R. Ovary x90. One or two large blood-filled follicles.

x690. The Membrana Granulosa of the blood-filled follicles is proliferative.

Blood vessels well-formed. Corpora Luteal remains partially organized as seen.

The excavation of the Cervix is surrounded by firm fibro-muscular tissue & lined by irregularly distributed & proliferative cylindrical epithelium.

V. Q. D. Oct 35. Congenital Umbilic

Very excited, noisy, destructive & troublesome.

Part mature. Naked Eye Appearances.

(1) R. Appendages.

Tube = $3\frac{1}{2}$ in - normal, within $\frac{1}{2}$ inch of frimbriated extremity three springs from the upper surface of the tube a slender stalk of $\frac{1}{2}$ in length

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this stalk terminates in a rosette of minute fimbriae & from its centre another & still finer stalk springs $\frac{3}{4}$ inch in length terminating in a unilocular cyst of pea-size containing albuminous fluid (Pedunculated Hydatid)

Meso. Salpinx - Vasculas - Parovarium small
Ovary elongated $1\frac{3}{8}$ in \times $\frac{1}{4}$ in surface smooth generally on section a few marginal follicles are seen.

(2) L. Appendages. Tube short $2\frac{1}{2}$ in; somewhat thicker than the Rt:

Meso-Salpinx Thin. Parovarium v. small not so vascular but from its base & from anterior surface of Meso-Salpinx a very attenuated thread-like stalk springs $1\frac{1}{2}$ inch in length terminating in a hydatid as on Rt: side. Ovarian Sac marked.

Ovary - more rounded, surface not so smooth as Rt: few marginal follicles seen on section. Ovarian Ligament short & thick.

Uterus. 2 in \times $1\frac{1}{2}$ externally, on section some watery fluid in cavity of Uterus proper - mucoid secretion in Cervical Canal.

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Microscopic Appearances.

Tube (Left) near ampulla $\times 90$ The factors of the wall including the complicated mucosal folds are well formed. The epithelium of the last is in the main perfect.

R. Ovary $\times 90$ Follicles are abundant though small & accumulated in clusters. Some of these clusters are isolated from their neighbours by comparatively less cellular tissue. The Blood vessel walls are well-marked. Here & there patches irregularly distributed of comparatively non-cellular tissue are seen. In the intervals between the nuclei of these patches no definite structure is traceable.

Uterus $\times 90$ The mucosal & other coats are well-formed.

The epithelium of the glands is normal.

VI. E. Ho aet 61. Single, Domestic,

suffering from Melancholia which followed Influenza. Refused food & very depressed.

Post mortem. Naked Eye Appearances.

R. Appendages.

Tube = 6 in. Thin. fimbriated end well developed

Meso-Salpinx. Healthy. Parametrium faint.

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Ovary: elongated 2 in. \times $\frac{1}{4}$ in.: surface smooth
in section inner $\frac{2}{3}$ is pale & atrophied

L. Appendages.

Tube = $3\frac{1}{2}$ in.: Fimbriae well-marked
a few cysts similar to opposite side.

Meso. Salpinx, a small pedunculated hydatid
springs from the ant: surface of outer portion.

Parovarium more distinct than Rt:

Ovary: elongated $1\frac{1}{2}$ in. \times $\frac{1}{2}$. surface smooth
in section tissue pale but not so pale as opposite
side.

Uterus = $2\frac{1}{2}$ in. \times $1\frac{1}{2}$ in.: of fair bulk, in section
a glairy white yellow secretion occupies
cavity of cervix & a more watery turbid
fluid is present in small quantity in
corpus.

Microscopic Appearances.

Uterus $\times 90$. The glands show decided catarrhal
change and there is a considerable amount of
leucocytes in the mucosal interstitial tissue.
In the muscular layers there is some Endarteritis
obliterans

Tube x 90. The vessels are engorged & their lumen in some cases distended. The type of the tubal epithelium is degraded into cubical epithelium at many parts. The ciliae are at many parts with difficulty detected. Columnar epithelium is however seen in many parts though frequently there is a double layer, the subjacent layer being of irregular formation. At other parts there is but a single layer of low columnar epithelium, the regularity of which is interrupted by subjacent oval & rounded ^{large} cells apparently of inflammatory origin.

Ovary. Vessel walls thickened, several degenerated follicles are seen i.e. degenerated in the direction of being filled with inflammatory products. No follicles of typical, healthy structure are detected. Large areas of structureless material slightly stained & interpolated between the tissues of the organ are present.

VII. H.C. cut 71. Suffering from Senile Dementia. Widow. Has had paralytic attacks for 12 years. Epithelium of Vulva.

R. Appendages.

Tube = $2\frac{3}{4}$ inch. Several small simple Broad ligament cysts = small shot size in region of Ampulla.

Ineso-Salpinx. Parovarium faint, healthy this is a small pedunculated hydrated form Ant: Outer portion.

Ovary - elongated $1\frac{3}{8}X$ cystic at outer end measuring here $\frac{1}{2}$ inch transversely. on section the ovarian

tissue appears to extend for some distance into the ovarian ligament. The cystic condition at the outer pole of the ovary is unilocular & appears to have been the result of distension of a follicle. The cystic fluid is clear, watery & straw-coloured.

L. Appendages.

Tube = 3 inches appears somewhat contorted and elongated towards the outer end & somewhat thickened.

Ineso-Salpinx. Parovarium indistinct, a few small cysts towards the outer portion, a small pedunculated hydrated springs from the anterior & outer portion.

Ovary - small & atrophied surface smooth $1\frac{1}{2}X\frac{1}{4}$ in.

Ovarian tissue does not appear to extend to same extent

into the ovarian ligament as on opposite side.

Uterus. 2½ in. X 2. On section cervical canal contains starch-like substance. Uterine cavity contains blood clot & sanious debris, the mucosa is deeply ecchymosed generally.

Microscopic Appearances.

Ovary X 90. Many of the vessels are engorged & in some cases there is parietal thickening amounting in one or two instances to luminal obliteration. Some partially obliterated follicles of atypical structure are seen accumulated in irregular groups. The structure of the organ in some places is suggestive of neoplastic change.

Uterus X 90 The mucosa is destroyed in many places by intra-glandular & interstitial blood effusion, whilst the muscular coat shows degeneration from the same cause and also there is some degree of leucocytosis in this portion of the uterine wall.

VIII. M. A. F. aet 48. Widow, suffering from Melancholia then Dementia. Suicidal. Alcoholic. Masturbates. Hypertrophy of Nymphæ.

Post-mortem, Naked Eye Appearances.

R. Appendages

Tube = $3\frac{1}{2}$ in; Thickened considerably in its outer third & lengthened, its mucosa is also here hypertrophied. On the dorsum of outer part of tube within $\frac{1}{2}$ in. of fimbriated end a fimbriated stalk springs. The length of this latter is 1 in. Fimbriae round the abdominal ostium are well marked.

Meso-Salpinx - normal - Parovarium distinct

Ovary - of normal size & structure a recently-ruptured follicle is present at the outer pole.

Left Appendages

Tube = 4 in: also somewhat thickened in its outer third though not to same extent as opposite side.

Meso-Salpinx normal. Parovarium very distinct

Ovary - normal size & structure.

Both Ovaries in sections show net-work-like molting of red & white, the red appearing to map off in mesh-like fashion the enclosed white areas.

Uterus = $2\frac{1}{2}$ in. \times $1\frac{1}{2}$ in. At Rt: Upper Posterior

Portion of Fundus there are three pedunculated Fibroids of pea-size. The pedicles are less than $\frac{1}{4}$ inch in length. On section nothing abnormal is visible — Arter Vitae in Cervical Canal is well marked.

Microscopic Appearances.

R. Tube \times 90. A large portion of the tubal structure is destroyed by haemorrhage. Catarrhal changes & leucocytes are present in the mucosal ridges.

Uterus \times 90. Many of the glands are imperfect in structure & there is no note-worthy change in the muscular coats.

Ovary \times 90. Tunica Albuginea is well marked & its component structures are delicately outlined. Towards the central portion of the organ some large spaces are visible filled with a structureless material (Corpora Lutea?).

Follicles are present in some number, some well defined, the majority irregular in outline & structureless in contents.

IX. A. D. aet: 30 married. suffering
 from Chronic Melancholia. suicidal,
 alcoholic, of immoral habits, been living
 with a man, no children, syphilitic.
 Had occasional severe fits, nature uncertain.
 always abusive & noisy.

Post-Mortem. Naked Eye Appearances.

R. Appendages.

Tube = 5 in: general size normal, Fimbriae
 not well marked

Meso-Salpinx Broad. The ovarian fimbriae
 2½ in: long, the proximal half of it is cord-like
 & shows no groove. Parovarium tubules faintly
 marked.

Ovary: Bulky & soft, surface somewhat smooth
 1½ in X 1 in: on section the tissue is seen to be
 soft & oedematous. & there are three distended
 follicles of small marble-size at the margin
 they contain clear straw-coloured fluid.

Corpus luteal remains are seen.

L. Appendages. are irregularly matted as a
 whole by the inflammatory process.

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Tube = 4 inches, contorted, somewhat thickened & hard. Fimbriated end of irregular shape. The abdominal ostium is much distended admitting a lead pencil. The Os has evidently been separated from an adjacent viscus in the process of P. M. manipulation.

Meso-Salpinx. Thickened & partially obliterated. Parovarium not recognisable.

Ovary: is matted to the Broad Ligament & has been mutilated by P. M. manipulation.

It appears to have been of somewhat bulky dimensions, its tissue is firmer than that of the other side & on section three small white points of shot-size are seen these are still harder than the surrounding tissue and appear to be ex-sanguine.

Uterus = $2\frac{3}{4}$ in. \times $1\frac{3}{4}$ on section nothing abnormal is detected.

Microscopic Appearances. $\times 90$ & $\times 690$.

Nothing special to note.

X. C. H. aet 61. Single. suffering from mania with Epilepsy. Alcoholic and Immoral, three months insane.

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Post-natum, Naked Eye Appearances.

(1) R. Appendages.

Tube = $3\frac{1}{2}$ in: somewhat thickened, an inch from the abdominal ostium proper there is an accessory ostium with well developed fimbriae. & ~~the~~ the distal & proximal portions of the tube involved are represented by two distinct apertures.

Meso-Salpinx normal in size.

Ovary - normal size & contour, on section no corpus luteum is seen.

(2) L. Appendages.

Tube = 4 in: outer inch is twice thickened & contorted. (See Microscopic Examination)

Meso-Salpinx. Shows a small intra-ligamentous cyst of pea-size & shape, contents albuminous fluid and the cyst is evidently developed from one of the vertical tubules of the Parovarium.

Ovary - normal size & contour, on section luteal remains are seen but no ripe follicles.

(3) Uterus = 3 in: X 2 in: appears normal.

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Microscopic Appearances.

L. Ovary. x 90. Tunica Albuginea distinct.

Remains of follicles are seen deeply set in the organ. Vessel walls are thickened.

L. Tube x 90 Blood vessels enlarged & engorged
Mucosal folds are considerably multiplied
& their epithelium is irregular & in many
places being shed. The connective tissue
of folds is also thickened & there is leucocytosis

Uterus x 90. Mucosal & other layers appear
normal.

XI. F. A. E. at 28. Single, suffering from
Melancholia. Insane for one year.

Post-mortem. Naked Eye Appearances.

(1) R. Appendages.

Tube much elongated. the outer 2 inches are
transformed into a cyst of tangerine size &
shape. Nature of fluid it contained not
ascertained. Within the cyst the fimbriae
of the proximal portion of the tube are seen
spreading out & gradually disappearing
over the inner surface of the attenuated walls.

There are no inflammatory adhesions sites on the tube or cyst and during life it would seem to have been a pedunculated floating cyst.

Two hydatids spring from the anterior, inner margin of the cyst.

Intra-Salpinx. Parovarium is unusually well marked & has no relation whatever to the cyst.

Ovary. $\frac{3}{4} \times \frac{1}{2}$ in: and on section shows a ripe follicle of shot size.

(2) L. Appendages have been mutilated in removal.

Tube portion present = $2\frac{1}{2}$ inches in length & is three thickened. The outer portion of the tube is not distinctly traceable but appears to terminate in a condition analogous to that affecting the other side - the walls of the cyst are much thicker however.

Ovary is not traceable

(3). Uterus 2 in \times 1 in, walls thinned. The Utero-Vesicle pouch has been obliterated by the mutual inflammatory adhesions of the peritoneum on the anterior surface of uterus & that on the posterior surface of bladder. Mucosa is unhealthy, is thinned & anæmic.

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Microscopic Appearances.

R. Ovary $\times 90$. The Tunica Albuginea is thickened
Follicles irregularly accumulated & of irregular
shape. Membrana Granulosa is irregularly
multiplied. So irregular are some of the follicles
in shape & so irregular their aggregation that
in these cases where the Membrana Granulosa
has multiplied so far as to fill the follicles
with compressed cell elements; the structure
has the appearance of a Sarcomatous Cancer.

Uterus $\times 90$ The elements of the walls seem thickened
& are hypertrophied & do not stain well.

L. Tube $\times 90$ All the elements of the wall are
infiltrated with inflammatory exudation
and in the cross section of the tube the remnants
of the lumen appear as some 10 or so irregularly
shaped cavities, lined by disorganized epithelium.

The muscular layers are unrecognizable.

XII R. J. B. act 68. Widow, suffering
from Senile Dementia, Duration years.

Post-mortem Naked Eye Appearances.

(1) R. Appendages.

Tube = 3 in: appears normal - slender -

a small tuft of fimbriae on a slender stalk springs from a point on the upper surface of the tube within $\frac{1}{2}$ inch from the ostium.

Calibre & structure of the tube appear normal.

Meso-Salpinx. There is a fairly well marked ovarian sac. Parovarium distinct.

Ovary. $1\frac{1}{4} \times \frac{3}{4}$ in: structure & configuration appear normal - on sections some ripe marginal follicles are seen & the remains of a corpus luteum.

L. Appendages.

Tube = 4 in: normal

Meso-Salpinx. Ovarian Sac not so marked nor is the Parovarium so distinct as on the Right side.

Ovary. $1\frac{1}{2}$ in \times $\frac{1}{2}$ in. Structure, configuration appear normal & on sections one or two small marginal follicles are seen.

Uterus. $1\frac{3}{4} \times 1\frac{1}{2}$ in: Plug of clear mucus in Cervix. Mucosa pale.

Microscopic Appearances.

Uterus $\times 90$ Tubular structure of Mucosa, atrophied

vessel walls thick, muscular layers not easily differentiable from each other.

Ovary - X90. "Germinal" layer is still well represented, no parts being well seen in the dips of the simple surface corrugations. There are no follicle remnants near the surface of the organ, but deeper many of them are irregularly accumulated, some few showing the kidney shape noted in some previous sections

XIII. A.R. act 75. widow. suffering from
Chronic Mania for eleven years.

Post-Mortem. Naked Eye Appearances.

(1) R. Appendages.

Tube = 3 in of small calibre.

Meso-Salpinx. Ovarian sac well marked.

Parovarium small, in the centre of the meso-Salpinx there is a small nodule of pea-size within the layers of the Broad Ligament.

This nodule is composed of hard blood clot & a calcified rounded nodule of gun-shot size.

This condition is probably the sequel of a simple Broad Ligament Cyst.

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R. Ovary - is small and contains two Corpora Lutea.

(2) L. Appendages.

Tube = 4 in; also of small calibre.

Meso-Salpinx, Ovarian Sac well-marked.

Parovarium small, situated as on the other side in the outer angle of the sac. A small nodule is present of fibrous texture pea-size in the peritoneum immediately anterior to the Ovarian fimbria

L. Ovary, very small, elliptical in shape, & is comparatively smooth & contains two corpora lutea.

(3) Uterus, = 3 in \times 1 $\frac{7}{8}$ somewhat thin-walled
Mucosa of Corpus is soft & haemorrhagic
that of cervix is not so soft & is not
haemorrhagic

Microscopic Appearances.

Uterus $\times 90$ In the outer half of the wall the vessel lumina are numerous & their walls are extraordinarily thickened enclosing little if any blood. In the inner half of the wall the tissue

is mainly composed of a network of engorged blood spaces, though here too at many points the vessels are much thickened, thickening being apparently due in the main to an inflammatory exudation amongst the wall elements. There is marked leucocytosis at parts, little if any typical gland structure is present.

XIV. M. A. A. act 68. Widow suffering from Chronic Mania for 10 years, noisy delusional & abusive.

Post-natens. Naked Eye Appearances.

(1) R Appendages.

Tube. = $2\frac{1}{2}$ contorted within the peritoneum.
Fimbriae abundant.

Meso-Salpinx. Thickened & shows a small ovarian sac. Parovarium not recognisable.

The Ovary. is very small $\frac{1}{2}$ in \times $\frac{3}{8}$ and has a perfectly smooth surface. On section the tissue appears practically barren.

(2) L Appendages.

Tube = 3 in: arched from adhesion & contraction

(34)

of ovary. Calibre appears normal. Fimbriae free and luxuriant.

Meso-Salpinx also somewhat thickened. Ovary is adherent by its upper surface in the ovarian sac. Parametrium is indistinct. Ovary is also small, smooth surface and apparently barren tissue.

(3). Uterus. $2\frac{2}{3} \times 1\frac{1}{2}$ there is a small fibroid sub-peritoneal nodule, partially pedunculated at the upper posterior part of fundus.

On section this nodule is seen to be partially calcified. The uterine cavity is filled with blood though not distended with blood clot. Mucosa is generally smooth, the small pits of gland mouths are evident. There is however a roughened portion of mucosa at the middle of posterior wall, this may possibly account for the haemorrhage. The microscopic section of corpus is from this region.

Microscopic Appearances.

Uterus $\times 90$. Nothing unusual is noticeable in the muscular coat. Superficial ulceration

is noticeable with the thickening of the portions which might represent the edges of the ulcer. Underneath the ulcerated portions the glandular arrangement is very irregular & contorted. The glands to the side of the ulcerations are in the main healthy, their lining epithelium being tall columnar ciliated epithelium with slight catarrhal changes here & there. In other glands again some large round cells are noticeable breaking up the regularity of the lining epithelium. Tracts of sub-mucosal hemorrhage are noticeable here & there.

Ovary. X 90. (Apparently barren to naked eye)

The sites of atrophied follicles are readily seen an ovum however is detected in the centre of an irregularly-shaped follicle at some distance from the surface of the ovary — it is surrounded by an undifferentiated material filling the remainder of the follicle.

XV. R. S. Married. Suffered from Chronic Mania for some years past.

Part. Martens Naked Eye Appearances.

(1) R. Appendages.

Tube = 4 in; arched round the ovary in its outer half, its fimbrial end being adherent to that organ. Its outer end is also somewhat thickened.

Meso. Salpinx, partially adherent to ovary, in dissection the Parovarium is faintly seen.

Ovary, superficially matted on both surfaces of Broad Ligament. In sections irregular aggregations of small follicles are observable.

(2) L. Appendages

Tube = $3\frac{1}{2}$ in: of very fine calibre, outer end somewhat thickened & fimbriae agglutinated.

Meso. Salpinx. Thin Parovarium barely seen.

Ovary, smooth & atrophied $\frac{7}{8} \times \frac{1}{4}$.

Uterus, $2\frac{1}{2} \times 1\frac{1}{2}$ walls thinned, mucosa of corpus is softened breaking down, that lining the anterior wall is in a softened, polypoid condition, one of the polypi being the size of a pea. The structure to the naked eye is suggestive of an adenomatous process. This polypus.

(37)

and the portion of the Uterine wall from which it springs are reserved for microscopic examination.

Microscopic appearances.

R. Tube ~~X90~~ mucosal folds are much thickened & inflamed & very vascular; at some few points columnar epithelium is retained, in the main however it is shed and an inflammatory exudation occupies the recesses of the mucosa.

Meso-Salpinx is also much infiltrated with inflammatory matter.

Uterus X90. (Cystic Polypus of Mucosa) Subjacent to the polypus & also at its side the uterine glands are dilated and filled in some instances with structureless effusion. The unilocular Cystic Polypus itself. (See naked Eye Exam.) appears to be but an exaggeration of this condition, in one or two adjacent glands their adjacent wall breaking down to form this comparatively large cavity.

(38)

The lining of epithelium is one, two or three layered and composed for the most part of cells of a degraded columnar type. The walls of the cyst is very vascular.

XVII. A. H. aet 60. suffering from
Chronic Mania. Duration some years.
Post-mortem - Naked Eye Appearance.

(1) R. Appendages

Tube 2 5 in appears normal

Meso. Salpinx shows some intra ligamentous
haemorrhage towards the hilum of ovary.

Parovarium. very faint.

Ovary. atrophied. smooth surface $1\frac{1}{2}$ in \times $\frac{3}{8}$

The Ovarian tunic extends for $\frac{1}{2}$ in: into the ligament

There are apparently derived from the Tunica Albuginea

(2) L Appendages

Tube = 4 in somewhat thickened at the
ampullary portion & its lumen is somewhat
patent in section.

Meso. Salpinx. There is a well-marked
ovarian sac & as appears to be general
in these cases, the Parovarium is found.

(39)
toward the outer angle of sac. The Ovarian
fimbriae of the tube joins the Ovary at
its posterior border at the junction of its
outer & middle thirds. It is probable
that this ovarian sac is caused by
inflammatory adhesions involving the
posterior border of ovary & a portion of the
meso-Salpinx above the level of the
Isthmus.

Ovary: Atrophied surface is smooth
 $1\frac{1}{2}$ in \times $\frac{1}{2}$ as on the other side. though
to a less extent, the superficial layers
of the ovary extend into the round
ligament.

Uterus, Ungated $\approx 3\frac{1}{2} \times 1\frac{1}{2}$ cm in hypertrophied.
There is a sub-serous calcareous nodule
(Calcified Fibroid) on the left anterior
portion of the Fundus. on section the
tissue of the hypertrophied cervix shows
considerable pallor. There appears to be
nothing specially noteworthy in the tissues of
Corpus Uteri.

Microscopic Appearances.

L. Tube ^{X900} Blood vessels of the walls are numerous and engorged, muscular layers not differentiable. The mucosal folds are thickened irregularly & for the most part wanting in epithelium.

Hypertrophied Cervix. The squamous epithelium of the surface is markedly developed. Surface "pittings" are present and the superficial layers of the squamous epithelium are traceable round these walls: in one or two instances the overhanging edges of these "pits" meet & suggest a mode of superficial cyst formation. The Stratum Lucidum of the squamous epithelium is especially well-marked at some parts. For the rest the section shows an irregular hypertrophy of the ordinary cervical factors. Catarrhal changes are present in the mucous glands of the cervix.

XVII. I. L. act 70. - Single - Cervix - Mania of considerable duration.

Post-natal Appearances.

R. Appendages. Tube = 5 in - very small in calibre

(41).

Ineso. Salpinx. partially resorbed by a very thin-walled cyst developed probably from one of the paravarial tubules. The cyst is of tangerine size and contains straw-coloured muc-albuminous fluid amounting in quantity to some drachms.

Ovary - $1 \text{ in.} \times \frac{3}{8} \text{ in.}$: smooth on surface and pale on section.

L. Appendages.

Tube = 4 in. : very thin except at ampulla where it is comparatively thicker.

Ineso. Salpinx somewhat thickened & contracted

Ovary = $1\frac{1}{4} \times \frac{1}{4} \text{ in.}$: elongated, almost cord-like in form. Smooth on surface.

Uterus. $2 \times 1\frac{1}{2} \text{ in.}$: a plug of viscid mucus occupies the cervical canal and a blood-stained less viscid mucoid material separates the walls of the corpus.

The Arter Vitae is well-marked in the cervical canal (see microscopic section).

Microscopic Appearances.

Cervix $\times 90$ Some little distance beneath the

(42)

mucous surface irregular areas of haemorrhage
are seen.

XVIII. E. O. R. act 39. Single. Suffering
from Melancholia. Duration = one year.

Part. Mortem. Naked Eye Appearances.

R. Appendages

Tube = 4 inches and is normal.

Meso. Salpinx normal. Perovarium is well

marked the convoluted character of its
tubules being well marked.

Ovary. - $1\frac{1}{2} \times \frac{1}{2}$ inch. The breadth of the
ovary increases distally. Surface smooth.
on section there is some mottling seen due
to the presence of dark green yellow spots in
some of the follicles, this coloration is doubtless
due to the deposit of the blood-colouring matter
from the haemorrhages into the follicles.

L. Appendages

Tube = $3\frac{1}{2}$ in - normal -

Meso. Salpinx, congested, in its outer half is
some ecchymoses, there is also some intra-ligamentous

(43).

Blood effusion close to the hilum of the ovary.

The Ovarian Sac is well-marked.

L. Ovary = $1 \times \frac{1}{2}$ inch. smooth in surface and mottled in section in same manner as organ as Rt. Side. The Ovarian Ligament is attached to the inner end of the posterior border at a point which appears to cause strain in the meso-salpinx and a "pitting" resulting in the formation of the ovarian sac referred to Uterus. $1\frac{1}{2} \times 2\frac{1}{2}$. In section nothing noteworthy is found.

Microscopic Appearances.

Uterus $\times 90$ Cutaneous changes are present in the mucous glands of the cervix.

Elongated Ovary, $\times 90$ Superficially the Tunica Albuginea & the connective tissue of the organ subjacent to this are increased in density.

Towards the centre of the organ follicles of various stages of degeneration are present.

In the case of those that are almost obliterated concentric arrangement of the tissue causing such obliteration is noticeable: a degenerated

ovum is seen here & there within these ill-formed follicles.

Summary A. (Special to Insam)

- (1). Slide & Drawing XII B. note the kidney shape of atrophied follicles.
 - (2). Comparative anaemia of the follicles.
 - (3). Case VIII - Peculiar mottled condition of the ovary with hyperaemia and stromal haemorrhage of tubes in notorious masturbator.
-

Summary B. (General)

- (1) Slide & Drawing XI B. - a condition in chronic Salpingitis.
- (2). Slide & Drawing XIV A. ? Early stage of malignant disease ???
- (3). Slide & Drawing XIV B. - Existence of a well-formed follicle containing an ovum in the ovary of a woman of 68.

(4) Slide & Drawing XV. Development of Cystic
Polypus from Utricular Glands.

(5) A Slide & Drawing XVI. Possible development
of Cervical Cyst from invagination of the
squamous epithelium of vaginal portion.

(5. B) Case TV. Development of Cervical Cyst with
its subsequent suppuration from dilatation
of Cervical Canal.

(6). Average length of Right & Left Tubes.
In eight cases out of eighteen the right tube
is longer than the left tube.

(7). In Senile Ovaries the aggregation of
thickened vessels, apparently in the site
of old corpora lutea, there may be
readily mistaken for follicles with
some fibrous change round them.

(8). In Case III. (also see Case IX). The immunity
from a specific change in the uterus and
appendages in a patient who died
from acquired Syphilitic Disease of the
Brain.

(9). Case IV. Uterine Stone of marble-size

probably from calcifications of Corpus Luteum.

(10). Case VII. With a condition of Uterus

Cancer nothing more may be noticeable in the condition of the internal organs of generation than mucosal hyperemia.

(11). Case XII Resemblance of the histology of

schirrhous cancer in centre of an ovary by the multiplication of membranous granulosum in closely adjacent follicles, partitioned off from each other by fibrous stroma.

(12). Hydatids. Pedunculated hydatids spring

in almost all cases from the anterior outer portion of the Meso-Salpinx share a close relation to either the Parovarium or the fimbriated end of the tube.

(13). The Parovarium is appreciably more prominent in the anterior than the posterior surface of the Meso-Salpinx.

(14). The adventitious formation of the ovarian sac as seen in cases V, XIII & XIV & XVIII

the sac appears to be due to the mutual

(47).

inflammatory adhesions between the upper outer portion of the ovary & the meso-salpinx close upon the Panniculus: the ovarian ligament being tense the result is the formation of a deep pocket which has to be distinguished from the congenital non-inflammatory & true ovarian sac.

John Gordon Gordon. M.D.

M. B. & C. M.



One of the lymphocytes representing a nucleus of light color. It is in general in field with inflammation material in trace of a normal epithelium. Inflammation is also seen in field.

From Slide XII B.

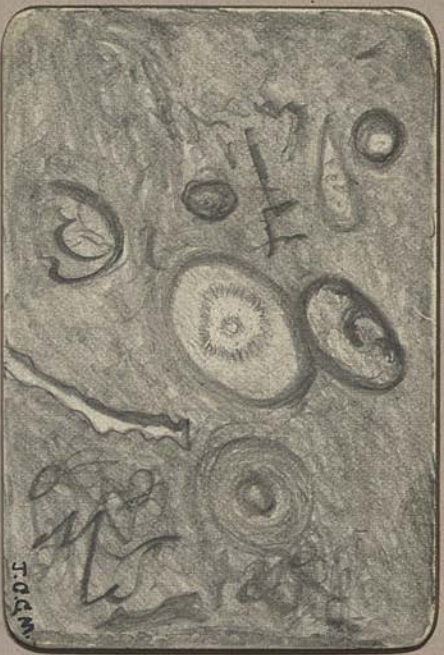
X 90
Camera lucida X 10



Showing the Kidney Shows around by some of the atrophied Graafian follicles in a senile ovary. Vessels well-marked. Atrophic changes in the other tissues.

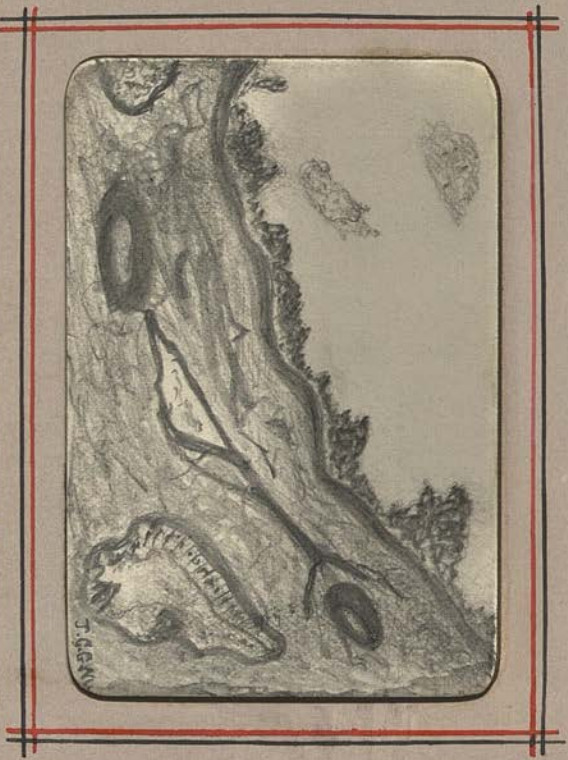


Showing ground cells ~~in~~ ^{forming} the corners of the utricular glands.
Stem in cross section with ~~retained~~ ^{retained} condition of the mucosa of duct: well
the stem of the ~~nerve~~ ^{nerve} changes, degenerative changes in adjacent glands & some cellular
infiltration of the mucosal matrix, thin cells may indicate an early stage of a malignant
process.

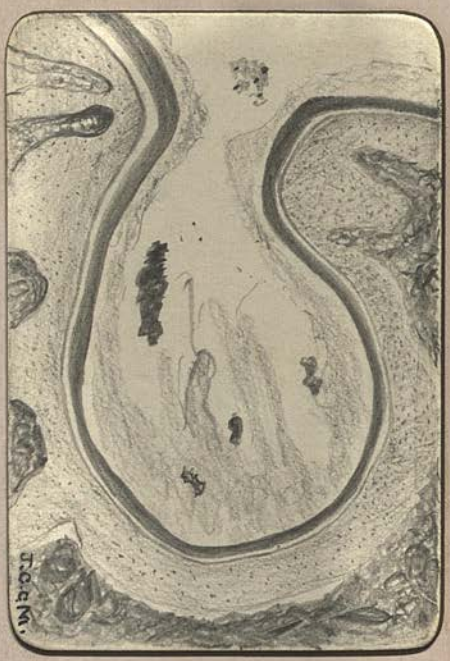


Showing a follicle & its contained ovum in a ~~slide~~ and to the naked eye apparently from ovary.

senile (act: 68)
to



Showing portion of the wall of *Micrococcus Lyticus*. Polyphases of *Micrococcus* & other -
-medial stages seen between this condition & adjacent extreme glands; from one or several
of which the polyphases is clearly developed.



Showing a typical method of development of Cervical Cyst from invagination of the squamous epithelium of the vaginal portion, the overhanging edge approximating.