

denote an injury not unlikely to give rise to brain mischief capable of originating the morbid manifestations, and the question of trephining of course suggests itself. But it is doubtful, even if his broken condition admitted of his undergoing an operation, whether good would be effected without the removal of an extensive area of bone, and one would feel some hesitation about subjecting a feeble patient to such a risky proceeding. His mental condition during the paroxysm is peculiar. It corresponds very closely to the "dreamy state" of Hughlings Jackson, but much more protracted than usual. In effect, without actual loss of consciousness there is some defect of consciousness analogous to what occurs in sleep with dreaming, or in this instance probably corresponding more nearly to the condition of a person just falling asleep, and would indicate, in Jackson's phraseology, a dissolution of the topmost layer, as it were, of the highest centres with hyper-physiological activity of the subordinate layers. And the patient's statement that during his hallucinations he cannot say at times whether he is awake or asleep would seem to bear out this view. The "weakness" and great prostration following the attack are strictly analogous to the transient paralysis following epileptiform convulsions, a definite paresis being evidenced in the accompanying diplopia, which, as well probably as the vertigo and nausea, depends on a certain amount of ocular paralysis. It is not unlikely that eventually a greater depth of dissolution may be reached, with general convulsions and coma.

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*Trophic Intestinal Affections in the Insane.* (With cases.) By  
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chester.

From time to time cases of diarrhœa arise in asylum practice which are not due to any specific cause.\*

This "simple" diarrhœa usually occurs in one or other of the "Organic Psychoses" of Krafft Ebing (*Lehrbuch der Psy-*

\* Dr. Claye Shaw, in a very interesting paper in *St. Bartholomew's Hospital Reports*, 1880, has described certain non-specific intestinal lesions in the insane. He there mainly refers to the production of ulcerations from the effects of long continued constipation or accumulation of undigested matters from irregular action of the intestine, liver, and pancreas. The causative condition in these lesions is mainly distension, acting mechanically, and one which in the cases here recorded we have carefully excluded.

chiatric") and in general paralysis of the insane for the most part. It is of comparatively long duration and is very often fatal.

The autopsy reveals an enteritis or a colitis, or both combined, which is often ulcerative.

The causes of these intestinal affections are not at all evident; none of the ordinary causes are present. The clinical and pathological accounts are in all strikingly similar, and it is most probable that all these cases have a similar origin.

There are two varieties of this "simple diarrhoea," although the more serious one is probably only an advanced stage of the milder variety and not a distinct type.

*Firstly.*—A very watery alvine flux, very frequently repeated, without passage of blood or excess of mucus; usually without any pyrexia or marked general symptoms. This may be fatal, but is often recovered from. Obvious intestinal lesions are rarely observed.

*Secondly.*—A frequent diarrhoea, with vomiting, pain, often tenesmus, and with marked constitutional symptoms.

The stools often contain blood, and occasionally excess of mucus, slime, and sloughs.

This affection is usually fatal.

The autopsy shows an inflammatory affection of the ileum and colon, and often with marked ulceration of the mucous membrane.

We have had under our care in the asylum at Prestwich, Manchester, a fair number of such cases. During the last three years thirty-two cases have thus arisen which have proved fatal. (See Table.)

It will be seen from that table that the greater proportion of these cases occur in males, and in those suffering from general paralysis of the insane. The remainder occur in either stuporous melancholia or in dementia of an incurable type. Most of the cases occurring are of the second variety.

*Clinical History* (of the second type for the most part).—Twenty-two cases are in males, ten in females. The age varies from 26 to 68 years, but most of the patients are over 40.

The onset may be sudden or gradual, the mode of onset varying with the acuteness of the attack.

The duration of the illness varies from three days to as many months.

The symptoms vary somewhat with the situation and extent of the lesions.

Diarrhoea is usually the earliest and most striking symptom.

Vomiting occurs at times, but this is not invariable, being often absent.

Abdominal pain is a very variable quantity. Some patients appear to suffer a good deal of pain, but this is not common. The demented condition of most of the patients renders them less susceptible to, and less apt to complain of, pain.

Tenesmus is at times present, especially when the lower bowel is affected.

Distension of the abdomen occurs but rarely.

The stools are generally loose, small in quantity, but frequently passed. Blood is often found in the motions, mixed and unmixed, and, in fact, the colour of the stools depends on the presence or absence of blood.

An excess of mucus is at times seen.

Slime, shreds of tissue or sloughs occur at rare intervals. The stools have usually a very offensive odour.

Perforation, with resulting peritonitis, is not common.

Pyrexia is often absent; when it occurs it is moderate and is irregularly manifested.

A fatal result is the rule. A few cases do undoubtedly recover, after presenting marked and serious symptoms.

*Pathological appearances found:—*

Patchy congestion of ileum and colon...	...	...	3
Patchy congestion of ileum and colon and enlarged solitary follicles	...	...	3
Patchy congestion of ileum and colon and submucous hæmorrhages	...	...	1
Subacute enteritis	...	...	2
Acute enteritis and colitis	...	...	2
Follicular ulceration of the ileum	...	...	3
Follicular ulceration of the colon	...	...	4
Ulcerative enteritis (ileum)	...	...	3
Ulcerative colitis	...	...	7
Ulcerative enteritis and colitis	...	...	4

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The amount and extent of the congestion of the mucous membrane is very variable. It usually affects both the small and the large intestine, but is more general in the ileum. The patches are small and discrete as a rule, but they may coalesce, forming largish areas of congestion. The colour varies from the bright hue of inflammation to the dull red of passive congestion.

If the congestion become extreme, there is a tendency for submucous hæmorrhages to occur.

One form of ulcer is probably formed by the abrasion of the already damaged mucous membrane superficial to one of these hæmorrhages.

The solitary follicles are very often enlarged. This condition is usually found in the colon, although it is by no means uncommon in the small intestine. Peyer's patches are rarely affected.

The follicles are swollen, softened, and there is a tendency to their disintegration and the formation of small rounded ulcers, each surrounded by a ring of congestion, leaving the neighbouring mucous membrane apparently healthy.

This follicular ulceration of the intestine is fairly common, seven out of the thirty-two cases showing this condition markedly.

In two cases perforation had occurred (Nos. 3 and 12); in both the ulceration was confined to the ileum. The ulcers had extended in depth, forming punched-out conical cavities, through the peritoneum forming the floor of which an opening had formed, with resulting peritonitis.

In the colon the follicular ulcers, while remaining of small size, showed much variety in their depth and often extended down to the peritoneal coat of the bowel. This was well seen in Case 8.

Follicular ulceration is, we are convinced, essentially different from the next form—ulcerative enteritis and colitis. This ulcerative process is more common than the follicular one. It is apparently *sui generis*. It is certainly not due to an extension from the former.

The ileum and lower part of the jejunum in the small, and the ascending and transverse colon in the large intestine, are the parts usually affected, but no part is exempt.

The mucous membrane of these parts is congested, swollen, and softened. Here and there, in a mild case, are irregular ulcerations, often with yellow sloughs adhering in parts. In a severe case the ulcers tend to run together so as to form an irregular network of ulceration, leaving islets of sodden and congested mucous membrane in their meshes. The ulcers are of various shapes and sizes. Their bases are but little thickened. The floor may be formed by submucous tissue, by muscle, or by subperitoneal tissue.

Perforation may occur, but in our experience is not common. The solitary follicles may be swollen, but are rarely ulcerated, and not seldom are normal in appearance where they can be distinguished. Peyer's glands are commonly unaffected, or but slightly swollen. The mesenteric glands are at times enlarged.

The acute inflammatory affections of the intestine present the usual appearances of an acute enteritis or a colitis.

The inflammation is often intense, and quite localized, but without any local causative condition within or without the bowel.

An intense phlegmonous enteritis may even thus arise without evident local cause. In the case described "in association with dorsal myelitis" the inflammation of the upper part of the rectum was most intense, the inner coats having sloughed out.

In a few cases evidence of diseased blood-vessels was found (atheroma), but whether this had any part in the degenerative process is doubtful.

Microscopically the usual signs of inflammation were present, but nothing specific could be made out.

The organisms present were those usually found in the intestine, but the bacillus coli communis was especially common. An inoculation of some of the contents of the gut on nutrient media often yielded an almost pure culture of this organism.

In all these cases there was a total absence of any specific disease. In fact, we have excluded all cases in the records in which there was the least suspicion of tubercle, typhoid fever, dysentery, Bright's disease, or syphilis.

These are the facts. How can they be explained? Writers on Medicine describe, but as a rarity, a simple ulcerative enteritis or colitis.

Fagge says, "Apart from typhoid fever and tubercle the small intestines are very little liable to serious primary diseases, and the jejunum particularly is remarkably exempt" (Fagge, "Medicine," third edition). Hale White ("Guy's Hospital Reports," 1888) describes a most interesting series of 29 cases of "Simple ulcerative colitis and other rare intestinal ulcers." He, however, throws no light on their origin, which he says is extremely obscure.

In asylum practice these simple ulcerations and inflammations are by no means infrequent. This is shown by the fact that in our practice during the last three years at the Prestwich Asylum, Manchester, thirty-two such simple uncomplicated cases have been examined post-mortem.

We venture, therefore, to put forward the proposition that these intestinal lesions form a part of the general degenerative process, and that they owe their origin to a nervous perversion. The only term that expresses this perverted nervous action is the rather vague one of a *trophic* or a *dystrophic* affection. The reasons for such an opinion are:—

1. The rarity of similar lesions in the sane.
2. The comparative frequency in the degenerative insane.
3. Negative evidence as to causation.
4. Their association with other trophic lesions.
5. The association of such lesions with diseases of the central nervous system.

The mental and nervous affections associated with these lesions are, as has been shown, of a markedly depressive or degenerative nature.

It is not at all unusual in the degenerate insane, and more especially in general paralytics of the insane, for trophic lesions to occur, such as—

- Atrophies of skin, muscles, and bones.
- Acute sloughings of tissues as seen in acute bed-sores and in the so-called "insane" abscesses.
- Herpetic and bullous eruptions.

A peculiar low form of pneumonia, which is probably of nervous origin.

Acute cystitis of trophic origin.

Some of these lesions occur in the same patients in whom the intestinal affections arise later. In fact, one or other of these tropho-neuroses is always present. In one man trophic ulcers of the legs were present (Case 4).

Dr. Hale White ("Guy's Hospital Reports," 1888) describes a case of intense colitis associated with disease of the central nervous system (double descending lateral sclerosis).

Dr. Acland ("Pathological Soc. Transactions," London, 1885) "raises the question whether in diseases of the spinal cord we may not get an ulceration of the intestine comparable to other trophic lesions, such as an acute bed-sore."

He records two cases of disease of the spinal cord, in both of which small ulcers were found in various parts of the bowel.

Curiously enough, a short time ago a similar case occurred in this asylum. A localized phlegmonous inflammation of the large intestine arose in association with a transverse myelitis in the dorsal region (see notes). In this case there was no local cause for the affection of the gut, and the only explanation valid was that the lesion was a trophic one.

We may thus explain the causation of the two varieties of diarrhoea first described.

(1.) The watery alvine flux frequently seen in general paralytics is due apparently to centric irritation of the vagus nerve. Buzzard regards a similar condition met with in certain cases of tabes as dependent upon irritation of the vagal nucleus in the medulla ("Dis. of Nervous System"). Bevan Lewis says: "In these cases the flux is probably the result of paralysis of the splanchnics (the vaso-motor nerves of the intestines), and to the resulting transudation of fluid from the blood-vessels into the bowel with the accompanying increased peristalsis" ("Text Book of Mental Diseases"). This vaso-motor paralysis probably gives rise to the varying patchy congestions and hæmorrhages.

(2.) The ulcers found are very often of the round, punched-out appearance which is usually held to be of dystrophic origin, and seen *par excellence* in the gastric ulcer (*Cf.* "Ord. St. Thomas Hospital Reports," 1892). The other variety of ulceration as best seen in ulcerative colitis is probably due to the same influence. It is due to a further extension of irritation

of the nuclei in the medulla causing a trophic inflammation and ulceration of the intestine. The ulceration once started is probably extended by the influence of the intestinal microbes on tissues of lowered vitality and powers of resistance.

The bacillus coli communis is most potent for evil in this respect.

Subjoined is a summary of the fatal cases, with fuller reports of nine of the most typical cases.

In conclusion, the tropho-neurotic origin of these intestinal affections seems to us the only possible explanation of their occurrence in the present state of our knowledge.

Hitherto, little notice seems to have been taken of these neuropathic lesions. There are but few and scanty references to them in the journals and text books.

We think, therefore, that some description of these very interesting cases should be published, so that they may be more generally recognized and investigated.

#### CASES.

##### *Phlegmonous Inflammation of the Large Intestine associated with Dorsal Myelitis.*

C. G., aged 34, was admitted in 1886, suffering from acute mania. He never improved, but became after a while feeble-minded, retaining, however, a few fixed delusions. His bodily health remained good until March, 1892. He was then found to be suffering from a gradually increasing weakness of the legs. This weakness rapidly increased until he became almost completely paraplegic (both of sensation and of motion). Knee-jerks were absent. There was retention of urine and incontinence of fæces.

He complained of girdle pains at the level of the ninth dorsal vertebra.

Early in April, 1892, he began to suffer from vomiting, abdominal pain, and diarrhœa. There was no rise of temperature.

The stools contained blood, but the blood was unmixed with the fæces.

On April 20th he passed a cast of the intestine, two inches long, which was evidently the mucous membrane and part of the muscular wall of the gut. Examination per rectum was negative.

The diarrhœa persisted, but at intervals only.

Later he developed cystitis, with irregular rises of temperature. He had a small bedsore.

Death occurred from exhaustion on May 18th, 1892.

## TROPIC INTESTINAL AFFECTIONS OF THE INSANE.

No.	Sex.	Name.	Age.	Mental Disorder.	Intestinal Lesion.
1	M.	W. B.	68	Senile mania.	Patches of congestion throughout entire tract.
2	M.	J. H.	44	General paralysis.	Patchy congestion of colon. Solitary follicles enlarged.
3*	M.	W. H. S.	50	" "	Follicular ulceration of ileum. Perforation.
4	M.	A. B.	37	Chronic mania.	Patchy congestion of colon with superficial ulceration.
5*	M.	J. M.	34	General paralysis.	Patchy congestion of ileum and colon with submucous hæmorrhages.
6*	M.	T. P.	57	" "	Ulcerative colitis.
7*	M.	J. C.	55	" "	Catarrhal enteritis.
8*	M.	J. B.	47	" "	Follicular ulceration of the colon.
9	M.	H. F.	34	" "	Patchy congestion of ileum. Follicles enlarged.
10	M.	R. J.	26	Epileptic dementia.	Follicular ulceration of colon.
11	M.	J. B. T.	43	General paralysis.	Ulcerative colitis. Submucous hæmorrhages.
12	M.	T. W.	6	Chronic melancholia.	Punched out round ulcer in ileum which had perforated. Ulcerative colitis.
13	M.	W. C.	43	General paralysis.	Patchy congestion of ileum and colon.
14	M.	J. H. C.	43	" "	Patchy congestion of ileum. Ulcerative colitis.
15	M.	W. L.	51	Chronic mania with dementia.	Patchy congestion of ileum. Ulcerative colitis (superficial and deep rounded ulcers).
16	M.	J. E.	48	General paralysis.	Patchy congestion with superficial ulceration of ileum.
17	M.	A. B.	63	Secondary dementia.	Ulcerative enteritis and colitis. Follicles enlarged.
18	M.	J. S.	3	General paralysis.	Ulcerative enteritis. Follicles enlarged.
19	M.	R. B.	40	" "	Ulcerative enteritis. Congestion of colon.
20	M.	J. B.	50	" "	Patchy congestion of colon. Enlarged follicles.
21	M.	R. S.	49	" "	Follicular ulceration of colon. Congestion of ileum.
22*	M.	E. J.	54	Melancholia attonita.	Ulcerative enteritis and colitis.
23	F.	F. S.	34	" "	Subacute enteritis. Submucous hæmorrhages.
24	F.	C. W.	29	" "	Follicular enteritis.
25*	F.	A. H.	28	General paralysis.	Ulcerative colitis.
26*	F.	E. A.	35	" "	Patchy congestion of ileum. Ulcerative colitis.
27	F.	M. N.	28	" "	Patchy congestion of ileum and colon.
28	F.	S. D.	50	Acute melancholia, chronic stupor.	Enteritis and colitis. Enlarged follicles.
29	F.	A. W.	46	Chronic melancholia.	Inflammation of ileum and ascending colon.
30	F.	O. A. B.	38	Epileptic dementia.	Patchy congestion. Superficial ulceration of ileum.
31	F.	A. G.	40	Secondary dementia.	Ulcerative enteritis and colitis.
32	F.	M. R.	50	Chronic melancholia.	Ulcerative colitis.

The cases marked \* are described more fully.



The autopsy showed a transverse myelitis at the level of the eighth and ninth dorsal vertebræ, with a localized spinal meningitis. There was thickening and roughening of the vertebræ at this level, but no definite tubercular lesion existed.

Evidences of old tubercle were found at apex of the left lung.

Cystitis and pyelitis with commencing abscesses in kidneys were present.

There was an intense, but limited, proctitis affecting the middle part of the rectum. The inner coats had sloughed away, leaving a rough shreddy surface. No evidences of any local origin of this rectal affection were found. The rest of the bowel appeared to be healthy. The intestines were moderately distended.

CASE 3.—*Follicular Ulceration of Ileum in a General Paralytic.*—W. H. S., aged 50, was admitted April 11th, 1892. He was then in the second stage of general paralysis. He had already become demented, but still retained some of his old exalted delusions. His muscular power was feeble and his muscles were shrunken. Skin greasy and shiny. Wet in his habits.

May 5th.—He was found to have slight right hemiplegia, which passed away in a few days.

July 8th.—He complained of abdominal pain and tenderness about the umbilical region. He vomited several times, and was evidently very ill. Slight looseness of the bowels. There had been constipation previously for a few days. The temperature normal. Stools were dark coloured, but did not contain blood.

July 9th.—“The vomiting and abdominal pain continues.” There is dulness on percussion in left iliac fossa. Marked tenderness of abdomen, which is slightly tympanitic. Stools are liquid, but do not contain blood or slime. Temperature sub-normal. There is evidently peritonitis.

July 10th.—He died collapsed early this morning. The autopsy showed marked congestion of the mucous membrane of the last four feet of the ileum. The solitary follicles were enlarged, and in a few ulceration had begun. Six rounded punched out ulcers were found in the above area, and in two cases perforation had occurred, with resulting peritonitis.

No other lesion was discoverable, no tubercle or other specific disease.

CASE 5.—*Patchy Congestion of Ileum and Colon, with Hæmorrhages, in a General Paralytic.*—J. M., aged 34, was admitted March 19th, 1892, suffering from general paralysis of the insane in the second stage. He presented the usual physical signs of that disease. Mentally he was demented, irritable and childish. He rapidly got worse, and was bedridden in the course of the next six months. At times he suffered from looseness of the bowels, alternating with constipation. Towards the end the diarrhoea became more marked. The stools were yellow and liquid, but never contained blood.

Signs of hypostatic pneumonia developed during the last week. He died from exhaustion on September 7th, 1892.

The autopsy showed marked patchy congestion of the ileum and colon, with submucous hæmorrhages. The solitary follicles were not enlarged. There was no ulceration of the intestine. No evidences of tubercle.

The lungs showed hypostatic congestion at the bases.

CASE 6.—*Ulcerative Colitis, with General Paralysis of the Insane.*—Thomas P., aged 57, was admitted October 25th, 1892, suffering from general paralysis of the insane, with exaltation. The case was a typical one in onset and course. The only symptom of intestinal trouble was the occurrence of rather severe diarrhœa, from which he suffered off and on during the last month of his life. The stools were watery, pale yellow, and did not contain blood or mucus. There was no vomiting. No pyrexia.

Treatment proved of no avail.

He died exhausted about three months after admission. The autopsy showed the usual changes in the nervous system found in general paralysis. Slight hypostatic pneumonia of the lungs. Marked atheroma of arteries.

The mucous membrane of the descending colon and sigmoid flexure showed several very congested and inflamed patches. Towards the centres of these patches, which were of limited extent, the surface of the mucous membrane was abraded, leaving small shallow ulcers. The solitary follicles were enlarged, but none showed any ulceration. There was some thickening of the wall of the gut opposite to these patches. No distension of the bowel.

The small intestine appeared to be normal.

CASE 7.—*Catarrhal Enteritis in a General Paralytic.*—James C., aged 55, was admitted October 31st, 1892, suffering from general paralysis of the insane, with melancholia. He had marked delusions of obstruction of the bowels, and was at one time very suicidal. About a week before his death he began to suffer from diarrhœa. He did not complain of pain, but there was some tenderness over the lower part of the abdomen. No vomiting occurred. There was moderate fever, the temperature rising and falling irregularly, but did not rise higher than 102°. He died rather suddenly in a kind of faint. The stools were loose yellow, and contained much mucus, but not blood.

At the autopsy patchy congestion of the lower part of the ileum and cæcum was found. The congested surfaces were rough and granular, but showed no definite ulceration.

The solitary follicles were not affected.

CASE 8.—*Follicular Ulceration of the Colon in a General Paralytic.*—James B., aged 47, was admitted December 8th, 1892, suffering from general paralysis with delusions of exaltation. He presented the usual symptoms of that disease, which ran its usual course until the onset of intestinal troubles.

He began to have diarrhoea on March 7th, 1893, accompanied with vomiting and pyrexia. The temperature rose to 103·6°. There was some pain in the abdomen, which was at first "board-like," but without tenderness. The stools were liquid, yellow, and very offensive. During the next week the pyrexia continued, the temperature varying from 99° in the morning to 102° in the evening. The diarrhoea continued, the bowels acting very frequently. There was no marked tenesmus. Stools were yellow, almost "pea-soup like," and at times contained shreds of tissue and blood. There was occasional vomiting. The abdomen towards the last became distended and tympanitic, with tenderness over the left side of the abdomen. Treatment was useless. Death occurred from exhaustion on March 12th, 1893.

The autopsy showed extensive changes in the large intestine, the whole of the colon and part of its sigmoid flexure being affected. There was much congestion of the mucous membrane in patches. The solitary follicles were greatly swollen, and many of them presented punched-out ulcers. In some the ulcerative process had only just begun, but in others the ulcers had nearly extended to the peritoneal surface of the bowel. None had actually perforated. The mucous membrane between the ulcers was darkly congested and superficially abraded. The wall of the bowel was distinctly thickened.

The small intestine appeared to be normal.

The brain showed the marked changes found in general paralysis. Marked atheroma of the large vessels. Considerable emphysema of lungs.

CASE 22.—*Ulcerative Enteritis and Colitis in a case of Melancholia with Stupor.*—E. J., aged 54, admitted December 11th, 1893. Died September 11th, 1894. He was a tall, stout, but unhealthy-looking man. He suffered from melancholia attonita. Used to sit in one position for hours, seeming quite crushed down by an overpowering weight of woe.

He remained in the same dull, stuporous condition during the remainder of his life. Often had to be fed with the stomach tube.

1894, September 4th.—There was slight pyrexia to-day. Diarrhoea set in, with some abdominal pain. No vomiting. Stools were loose, yellow, and did not contain blood, slime, or mucus.

September 5th.—Temperature a.m., 100°, p.m. 100·6°. He passes frequent, small, loose motions. Abdomen rather retracted. He does not complain of pain, but this is probably due to his stuporous state.

September 6th.—He is much the same. Moderate pyrexia. Diarrhoea continues. Tongue dry, brown, and cracked.

September 8th.—Streaks of blood and shreds of tissue were noticed in the stools to-day. Looseness of the bowels continues. He is getting weaker. No fresh physical signs.

The patient's condition steadily grew worse, the abdominal symptoms and diarrhoea persisting.

He died exhausted on September 11th, 1894.

The autopsy showed marked ulcerations of the lower part of the ileum and almost the whole length of the colon. The mucous membranes of ileum and colon were darkly congested, swollen, and superficially ulcerated. The solitary follicles were somewhat enlarged, but not ulcerated. Peyer's patches were unaffected. The ulceration of the ascending and transverse colon was most extensive, leaving here and there isolated patches of swollen and congested mucous membrane. The edges of the ulcers were sinuous, cleanly cut, and exposing in the floor muscular fibres. None had, however, perforated. The other organs were healthy. The liquid faeces in the intestine were yellow, blood-stained, and most offensive.

A growth was obtained from the intestine on agar-agar and on potato, which consisted of an almost pure culture of *B. coli communis*.

CASE 25.—*Ulcerative Colitis in a General Paralytic*.—Ada H., aged 28, was admitted July 7th, 1893, suffering from general paralysis with melancholic symptoms. She fancied that she had committed some dreadful crime and was eternally damned. Typical signs of general paralysis were present. Bodily health fair. On August 16th, 1893, vomiting and diarrhoea occurred for the first time. Pain in the abdomen, without tenderness or distension. The stools were loose, offensive, and contained a little blood. These symptoms persisted until the death of the patient, which occurred from exhaustion on August 24th, 1893. There was slight pyrexia on the last two days.

At the autopsy all the organs were found to be healthy except the colon. The brain presented the usual general paralytic changes.

There was marked congestion of the caecum and ascending colon, with several superficial ulcers of irregular shape, but with curved margins and smooth base. Very little thickening. The solitary follicles were somewhat, but not markedly enlarged.

CASE 26.—*Ulcerative Colitis with General Paralysis of the Insane*.—Elizabeth A., aged 35 years, was admitted June 13th, 1893. She suffered from general paralysis with melancholia. She also had delusions of great sins having been committed by her, and of eternal perdition in consequence.

On October 22nd, 1893, she began to suffer from diarrhoea, which persisted for two months. There was no vomiting, and pain was rarely complained of. No abdominal distension. The temperature at times rose to 100°. The stools were loose, frequent, contained at times blood, but never slime or shreds of tissue. Death occurred from exhaustion on December 20th, 1893.

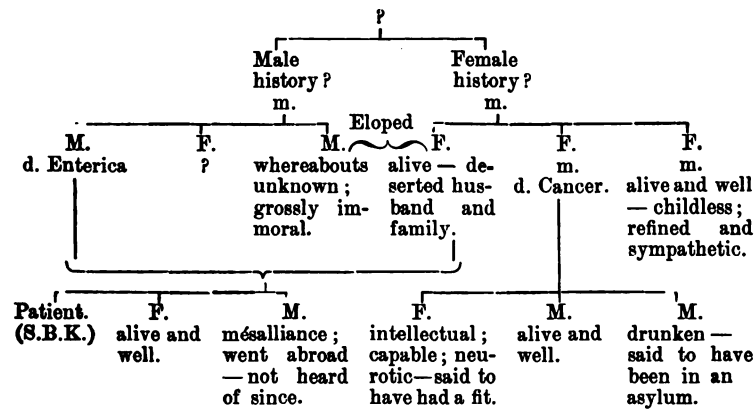
The autopsy showed patches of congestion in the lower part of

the ileum and a rather chronic colitis. The mucous membrane of the colon was softened, thickened, pulpy, and showed many superficial ulcerations. The bases of the ulcers were rather thickened, the floor ragged and uneven, and stained a dark yellow by adherent fæces.

*Notes of a Case of Epilepsy with Aphasia.* By FRANK HAY, M.B., Assistant Medical Officer, James Murray's Royal Asylum, Perth.\*

S. B. K., male, single, aged 39, was admitted into James Murray's Royal Asylum on the 26th October, and died on the 26th April following.

The family tree, here appended, bears witness to a strong neurotic inheritance, with consanguinity of parents.



There is no trustworthy history of the patient's childhood, which was spent abroad; but it is evident, owing to the infidelity of the mother and the early death of the father, that he could not have had the careful nurture requisite for his unstable brain. However, he is said to have received a good average education.

Without regard to his special aptitudes, his guardian, the paternal grandfather, put him to the work that came nearest to hand—a clerkship.

The patient's natural disposition was quiet and reserved, highly sensitive, proud, and independent. His sane habits were steady, painstaking but slow, regular, methodical and punctilious. He was a member of the United Presbyterian Church.

He lodged alone, his sister having been adopted by a relative

\* Paper read at the Scottish Division of the Association, held in Edinburgh, Nov. 8th, 1894.