

tapeworm (Fig. 4), all the faeces passed after the administration of the saline aperient should be sent for examination. A search is made for the head by washing the faeces through a metal 28-mesh sieve. Unless such a sieve is used the head of the worm may be lost, so no attempt should be made to concentrate the specimen before it is sent to the laboratory. Specimens should be sent to the laboratory as

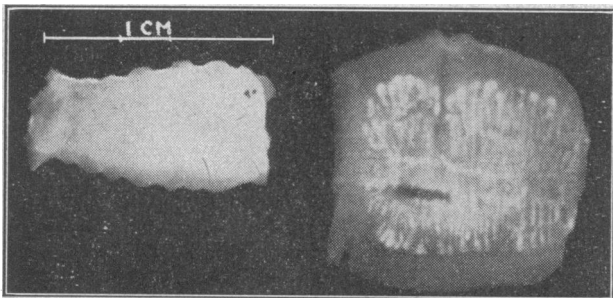


FIG. 3.—*Taenia saginata*: mature segment and flattened segment showing uterus.

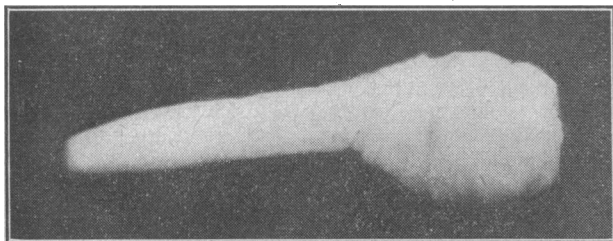


FIG. 4.—Head of *T. saginata*. (×25.)

soon as possible, for once the worm has been passed it tends to degenerate. It is worth remembering that tapeworm ova are very rarely found in the faeces, because they are not liberated until the mature segments degenerate.

Criteria of Cure

If any of the antibiotics, such as chloramphenicol, aureomycin, or terramycin, have been given, or one of the intestinal sulphonamides, tests of cure should not be started until about five days after the drug has been stopped.

Salmonella and Shigella.—At least three consecutive negative examinations are necessary before a cure can be established. Because salmonella organisms often localize in the gall-bladder, it is best to obtain a specimen of faeces after a saline aperient, which will act as a cholagogue.

Specific Serological Types of Bact. coli.—Before it is safe to allow a child who has been excreting these organisms to enter an uninfected community of infants at least six faeces cultures, taken on alternate days, should be negative. If the baby is living in a community in which a specific type of *Bact. coli* is endemic, then it is preferable for the clearance tests to be made when the baby is away from that community. If the infant is going to its home, and other babies are not in the house, three negative results would be sufficient.

G. lamblia.—Three daily specimens should be examined three days after the mepacrine course has finished. It must be remembered that other members of the household may be infected and in this way the patient may easily become reinfected.

Ascaris, etc.—Examination for the ova of worms is preferably made on faeces obtained following a saline aperient, and at least six negative specimens should be obtained.

E. histolytica.—At least six daily specimens obtained after saline aperients should be examined for the cysts. It is also advisable to repeat these examinations six months later.

Next article on Clinical Pathology.—“Chemical Examination of the Faeces,” by Dr. W. W. Payne.

“STATUS LYMPHATICUS,” THE GROWTH OF A MYTH

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The latest edition (the sixteenth) of *Principles and Practice of Medicine*, originally edited by Osler, defines status lymphaticus as “a combination of constitutional anomalies, among which are hyperplasia of the lymphoid tissues and of the thymus gland, hypoplasia of the cardiovascular system and peculiarities of configuration, with frequent sudden death.” Results of the condition are various, among them are: (1) Liability to sudden death—this may be from anaphylaxis, cerebral haemorrhage, or, in young children, pressure on the trachea by the enlarged thymus gland. (2) Increased susceptibility and decreased resistance to acute infections. (3) Increased danger in childbirth. (4) Psychical instability; these subjects forming a large proportion of cases of drug addiction and suicides.

The most circumstantial account of the condition is given by Hewer (1953). According to him the findings of Kemp (1932), Campbell (1937), Moncrieff (1938), and the late Sir Bernard Spilsbury, in spite of several attempts to discredit their work, have definitely established the existence of the syndrome. It would seem that Hewer bases his case that status lymphaticus exists as a clinical entity upon three claims: (1) that the condition has been recognized for some 300 years; (2) that there is a recognized clinical picture with three classical signs; and (3) that there are well-recognized post-mortem findings. I propose to show that not one of these claims is supported by the available evidence.

Attitude of the Textbooks

In contrast to the above the attitude of the textbooks of pathology is much less positive, although the writers of such works must have much greater experience of the post-mortem findings in such cases; or is it for just that reason that their attitude is one of doubt or of definite scepticism?

Thus Boyd (1947) states that “there is no proof that the thymus gland has anything to do with stoppage of the heart.” Dible and Davie (1950) state: “There is no doubt that ignorance of the great variation in size to which the thymus gland is subject in health and disease has often led to an unjustifiable resort to the convenient diagnosis of status lymphaticus in cases of sudden death. . . . Many pathologists of experience are of the opinion that there does exist some abnormal constitution or condition which is associated . . . with a liability to sudden death from relatively trivial stimuli, such as excessive sensitivity to stimuli of the autonomic nervous system, but no constant anatomical or pathological abnormality.” Muir (1951) quotes the findings of the Joint Committee of the Medical Research Council and of the Pathological Society of Great Britain and Ireland, its general conclusions being that the facts that have been ascertained afford no evidence that the so-called status thymo-lymphaticus has any existence as a pathological entity.

The conclusion in Muir’s textbook is that “this does not imply that there is not a constitutional condition of low resistance power, with a tendency to sudden death; simply that it is not possible to relate it definitely to thymic or lymphoid hyperplasia.”

Green (1949) states that there are “no manifestations of the condition during life, but violent exertion, rapid temperature change or anaesthesia may lead to sudden death,” and, finally, “it has been agreed that status lymphaticus

as a pathological syndrome, based upon pure thymic dysendocrinism, does not exist."

If Dr. Hewer's story were correct we should expect to be able to follow these references to status lymphaticus back to the earliest editions of current works and further back still in the earlier editions of books now out of print but in being before Osler's *Medicine* was produced.

Ewing and the Vienna School

Actually there is no reference to the condition in Osler's first and second editions, or in any contemporary medical or pathological book I have been able to discover such as Fagge (1888, 1891), Bristowe (1890), Roberts (1873, 1890), Taylor (1890), or Coats (1895); in fact, it is not until the third edition of Osler's *Medicine*, published in 1898, that any reference is made, and then in these terms: "Much attention has been paid lately to a somewhat rare condition . . .", and the reader is advised to consult an article by Ewing (1897).

Ewing in discussing the views of Paltauf (1889) begins: "There have recently been described a series of cases . . ."; he continues, "The importance of the constitutio lymphatica and its relation to some forms of sudden death, especially to fatalities under chloroform narcosis, have been recognized by the Vienna school of pathologists, but have received very scant attention elsewhere."

Six successive editions of Osler's *Medicine* carried the passage based upon Ewing's article but without his final sentence, which ran: "In conclusion, while the studies of the Vienna observers seem to have placed the existence of the constitutio lymphatica upon a firm basis in pathology, the observations yet remain far too limited fully to demonstrate the truth of an hypothesis which connects a large class of sudden deaths with simple hyperplasia of the lymphatic structures of the body."

It is surely significant that Paltauf makes no mention, in a long list of references, to any work published earlier than 1850; equally so that John Simon (1845)—although his bibliography is immense, going back as far as Galen and Rufus of Ephesus—seems entirely to have missed this historical association.

Growth of the Legend

The history of the growth of the legend of status lymphaticus can be quickly told; gradually during the first decade of the twentieth century the idea of a status lymphaticus began to spread, so that in the eighth and ninth editions of Taylor's *Practice of Medicine*, in 1908 and 1911, references begin to appear, and in 1911 for the first time a separate entry of diseases of the thymus gland makes its appearance in the annual report of the Registrar-General for England and Wales.

In 1917 Dr. Symmers, professor of pathology at the Bellevue Hospital, New York, published an original work upon status lymphaticus in which he recorded the weights of the thymus gland in 66 cases out of 249 which he had diagnosed "status lymphaticus."

The weakness of Dr. Symmers's case is that he publishes no standard for normal weights of the thymus gland, and if we compare the weights of his enlarged glands with the normal weights arrived at by Hammar (1916), or by the Medical Research Council's Joint Committee (1931), whose findings were based on a much larger published collection, we find that a preponderance of these abnormally heavy glands of Dr. Symmers's fall within these other observers' normal weights.

However, Dr. Symmers's views have gained much popularity and have formed the basis of the description of the condition in Osler's *Medicine* from the eighth edition, of 1920, to the latest, the sixteenth, published in 1947.

Platter's Observations

Felix Platter's name does not appear in connexion with status lymphaticus until 1925, although his name was brought

to the attention of American medical men some years earlier by C. G. Cumston (1912), who quoted some extracts from Platter's memoirs and from some other papers of his still preserved in the museum of his native Basle.

In 1925 Ruhrah gave a short sketch of Platter's life and the text of a short article to be found in his *Observationum in hominis affectibus*, together with an English translation (not without error). Ruhrah's own comment was: "To paediatrics we know he made one contribution of great value, the description of thymus death; like many first descriptions of disease it is contained in a few words."

Marine (1928) referred to this observation of Platter's, and in 1932 Kemp began a long original article upon status lymphaticus with Ruhrah's translation of the paragraph from the *Observationum*—error and all.

The first edition of Hewer's *Recent Advances in Anaesthesia and Analgesia* appeared earlier the same year, I presume, since there is no reference in his work to Platter's observation; but in the second edition, published in 1937, Platter's article is quoted and the legend of the 300-year-old tradition is fairly launched in British medical literature; although one tentative diagnosis at one post-mortem examination is perhaps rather scanty material. From the fourth to the latest (the seventh) edition of *Recent Advances* the date of Platter's article has been placed in 1641; one can only say what a remarkable old gentleman Felix Platter must have been to have published his three volumes of clinical reminiscences at the age of 104. However, there can be little doubt that the date of his death as given on the plaque in Basle Cathedral—July 28, 1614—is the correct one; the 1641 edition of the *Observationum*, a copy of which is to be found in the library of the Royal Society of Medicine, is really only a reprint of the work brought out a few months before the author's death in 1614.

"Classical" Signs

With regard to the "classical" clinical signs—those of Sergeant, Schridde, and Orroya—they are mentioned for the first time by Kemp (1932), who quotes no case notes to support his statements; no other writer records cases presenting these physical signs, nor that of Madan; while the three leading medical dictionaries—Dorland's, Stedman's, and Blakiston's "New Gould"—make no reference to Orroya or to Madan.

Campbell (1937) lists an impressive number of physical signs, far too numerous to be mentioned here, associated with status lymphaticus, but, like Kemp, fails to favour us with any case records.

As to Sir Bernard Spilsbury's post-mortem findings in status lymphaticus, I have been completely unsuccessful in my attempt to discover any published work in which such findings are quoted. In 1926 there was set up a Joint Committee of the Medical Research Council and of the Pathological Society of Great Britain and Ireland, which published its report in 1931; some 680 post-mortem examinations were made, and the care and detail with which these cases were analysed place this investigation in a class by itself. Hewer (1953) relegates all reference to this committee's report to a footnote, it being apparently one of "several attempts [that] have been made to discredit the existence of the condition," and prefers to base his belief upon the views of Kemp, Campbell, Spilsbury, and Moncrieff, although the last-named alone of these four quotes any case notes—those of seven children, none of whom are reported as having died but whose thymus glands are diagnosed as enlarged by x-ray photography—a somewhat unreliable basis, as the writings of Garland (1929) and of Capper and Schless (1934) have emphatically shown.

I suggest that were this account of status lymphaticus other than a fable ample material in support could have been found among the thousands of post-mortem examinations reported since 1945 by Helperm and Rabson (1945), Keith Simpson (1947), Richards, (1947), Deadman (1947), and others, or from among the odd 200 deaths reported annually by the Registrar-General for England and Wales.

Conclusion

In conclusion, until some such evidence is produced we must surely accept, as does Professor Weiss (1940), that instantaneous physiological death occurs, but is not associated with either clinical or pathological signs, that the twelve conclusions of the Joint Committee remain the considered judgment of informed opinion, and that the last sentence of their report holds good: "In the opinion of the Joint Committee the facts elicited in the present inquiry are in harmony with those of Hammar (1926, 1929), and of Greenwood and Woods (1927) in affording no evidence that so-called status thymo-lymphaticus has any existence as a pathological entity."

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Nova et Vetera

"THE NAPOLEON OF SURGERY"

Medical students' notebooks written in the more leisurely days of the last century or earlier sometimes provide little-known facts about their teachers, the state of contemporary medical education, and the day-to-day events, all so valuable to the historian who comes after.

Professor Charles McNeil recently published¹ some excerpts from a notebook kept by his father, William McNeil, in the year 1861. At that time William was a student of James Syme, the Edinburgh surgeon, and the importance of the notebook is that it brings back to life some of the words and acts of Syme at the height of his achievement and influence.

Before the advent of anaesthesia Syme already had a reputation for conservatism in surgery. He was neither quick nor brilliant as a technician, but he always insisted on scrupulous cleanliness at operations. In 1829, having failed to obtain an appointment on the surgical staff of Edinburgh Royal Infirmary, he opened a small surgical

¹A Student's Notebook of James Syme's Class of Clinical Surgery in 1861-62. Kept by William McNeil, M.D. Ed. 1864: with Extracts and Comments by Charles McNeil. *Edinb. med. J.*, 1952, 59, 266.

clinic at Minto House, where he rapidly built up a reputation second to none in Europe. His lectures were always crowded, and he was received by his assistants and students like a monarch. Alexander Miles has called him "the Napoleon of surgery." His pupils included Lawson Tait and Joseph Lister, who both inherited his zeal for surgical cleanliness and who were afterwards to diverge so widely in their methods of developing it. Lister later married Agnes, Syme's daughter.

An earlier pupil (in pre-anaesthetic days) was John Brown, later to distinguish himself as an essayist. His sketch *Rab and His Friends* immortalized the little hospital at Minto House. Syme was the surgeon who operated on Ailie for a cancer of the breast, who "dressed her [wound], and spoke to her in his own short kind way, pitying her through his eyes."

Professor McNeil has included sufficient extracts from the notebook to show the setting in which a great surgeon worked 90 years ago. "Beside him are his assistants—the house-surgeon and dressers; around, on the crowded benches his students, attentive and admiring; over the head of the surgeon bending to his work the invisible but felt aura of his experience and reputation." The patients, too, are not mere cases, but become living creatures, like the little girl from Wales, aged 8, who "seemed in the very highest spirits, was carrying a large doll very gaily dressed, and laughed immoderately at the round of applause with which the students greeted her appearance." There is also the man with cancer of the scrotum who did not reply when Syme asked whether or not he would like chloroform.

"Pr. [Professor] Syme with a pair of scissors at once cut out the cancer which was situated in the most dependent part of the scrotum. The shouts of the fellow were terrific. Pr. Syme, after he had completed the tying of the vessel cut, questioned him concerning the period of its growth, and got for a reply: 'Hoo the devil can I answer ony questions just noo?' This created a very hearty laugh among the students, which did not improve the temper of the patient. He left the theatre uttering imprecations on Pr. Syme and all concerned."

The callousness of surgeon and students sometimes implied by the notes is, as Professor McNeil points out, countered by the sympathy and pity for the patient so well expressed in *Rab and His Friends*: "Don't think them heartless; they are neither better nor worse than you or I; they get over their professional horrors, and into their proper work; and in them pity as an *emotion*, ending in itself, or at best in tears and a long-drawn breath, lessens, while pity as a *motive* is quickened and gains power and purpose." And again, after the operation on Ailie: "It is over; she is dressed, steps gently and decently down from the table, looks for James; then, turning to the surgeon and the students she curtsies, and in a low, clear voice, begs their pardon if she has behaved ill. The students—all of us—wept like children."

With the notebook we can picture the dramatic scene in the surgical theatre 90 years ago; on the stage the surgeon, assistants, and patients; in the audience the students, with eyes and ears directed to the stage, where Syme dominates the scene and conducts the play.

Preparations and Appliances

AUSCULTATION IN ANAESTHESIA

Dr. J. D. LAYCOCK, consultant anaesthetist at St. Thomas's Hospital, writes: During thoracic operations it is important for the anaesthetist to be able to detect with ease the presence of secretions in the bronchial tree so that he may pass a suction catheter and remove them. A large amount of secretion may be recognized by an audible rattle which is not easily missed, but smaller amounts may pass unnoticed.