

was discharged well on May 4th. When seen in December, 1896, he had some tendency to a small ventral hernia at the seat of the scar, and was ordered an abdominal belt. He had no more pain or abdominal trouble. With regard to the condition of the appendix, it was enlarged and thickened throughout its whole length. In its middle third it was distended into a tense sac, which on opening contained a little muco-parulent fluid and a hard oval-shaped enterolith. The coats of the appendix on section showed evidence of chronic inflammation, which was most marked in that part of the tube where the enterolith lay impacted.

CASE 2. Relapsing appendicitis; removal of appendix after the seventh attack; complete recovery.—A lady, aged twenty-eight years, was seen in consultation with Mr. Turner. She had had seven attacks, varying in severity, during the past four years. The present one began seven weeks previously with vomiting and pyrexia. She had been an invalid in bed ever since with occasional pyrexial attacks and exacerbations of pain in the right iliac fossa. The tumour could be plainly felt in the position of the appendix and was tender on palpation. She had lost flesh considerably. Operation was performed on Oct. 16th, 1896. The abdomen was opened by an oblique incision (as for a right inguinal colotomy). The appendix was found to be elongated and much thickened. There were no adhesions around. A circular flap of peritoneum was raised from it about half an inch from its junction with the cæcum. The muscular and mucous coats were ligatured with silk and the organ was removed after its mesentery had been ligatured with several interlacing silk ligatures. The stump of the appendix was touched with pure carbolic acid and the serous coat stitched over it with a continuous suture of fine catgut. The abdomen was closed. Primary union of the wound ensued. The patient has lost all her pains and has been perfectly well since.

The following microscopic report by Dr. Stanley relates to the condition of the appendix. Section through the appendix showed considerable thickening of, and deposit of fibrous tissue in, the peritoneal surface, with formation of new vessels. The muscular coats were also thickened and there was increase of the interstitial fibrous tissue. The mucous coat showed a form of degeneration of the epithelium and sub-epithelial cells into a series of cells having an epithelioid character and forming a fairly thick layer. In this layer the Lieberkühn follicles and solitary glands were embedded. This cellular layer was covered by cylindrical epithelium which was somewhat retrograde in type, being less well-defined than normal and the cells being irregularly shaped.

CASE 3. Relapsing appendicitis; removal of the appendix after the seventh attack; recovery.—The patient was a thin, delicate-looking boy, aged six and a half years. He was admitted into the Children's Hospital on Nov. 26th, 1896, suffering from appendicitis. With regard to the history, he had had six previous attacks similar to the present one, but increasing in severity, during about thirteen months. This attack began fourteen days before admission with sudden severe pain in the right groin with acute tenderness and fever. Until these attacks commenced he was strong and healthy; he had been gradually getting thin and weak since. On admission to hospital he lay with his right thigh flexed on the abdomen and complained of much pain in the right iliac fossa. There was a hard, oval, tender swelling to be felt about two inches below, and to the right of, the umbilicus. The bowels were constipated, and the tongue was dry and furred. Under rest in bed the tenderness became less, and though he vomited occasionally he improved somewhat in general health. The swelling became slightly smaller. An operation was performed on Dec. 8th. The abdomen was opened in the right iliac fossa just external to the mass. The intestine was found adherent to the abdominal wall. The appendix was coiled upon itself and distended into a hard spherical lump. This was with difficulty separated from the parietal peritoneum and omentum. It was ligatured with silk at its junction with the cæcum and excised. The stump was touched with pure carbolic acid. The abdominal wound was closed. His temperature remained normal after the operation, but his pulse continued somewhat high, varying from 100 to 120, and he vomited slightly on two occasions. On the third day the wound was dressed, and on inserting a small probe about half an ounce of faecal-smelling pus escaped. A small drainage-tube was put in. By Dec. 14th all discharge had ceased, the tube was removed, and all stitches were taken out. On the 20th the wound was soundly closed and the patient was

beginning to increase in weight. He remained an in-patient until Jan. 20th, 1897, when he was discharged, having quite regained his old weight and colour, and his bowels acting well daily. With regard to the appendix, it was distended in its middle third into a sac, which contained a hard faecal concretion firmly wedged in it. The distal portion of the appendix was contracted and acutely twisted back upon, and adherent to, the dilated portion. The whole organ was adherent to the coats of the small intestine and the abdominal parietes.

ILLUSTRATIVE CASES OF APHASIA.

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(Continued from p. 1143.)

CASE 11. Sudden cerebral attack after confinement; absolute deafness to all sounds for sixteen days; temporary motor aphasia and word-blindness; absolute word-deafness for four weeks; rapid recovery from the motor aphasia; partial recovery from the word-blindness; very slow and imperfect recovery from the word-deafness; slight paraphasia and slight paraphagia; echo speech; retention of the power of writing from dictation and of reading aloud; no hemianopsia; re-development of acute cerebral symptoms (meningitis or cerebritis) six months after the original attack; hyperpyrexia; death; no necropsy.—This case, which is the most striking example of word-deafness without total aphasia which has come under my own notice, presents many points of interest and importance. It is very unfortunate that there was no post-mortem examination; but there can be little or no doubt that the lesion was entirely, or almost entirely, confined to the auditory speech centre or the afferent tracts going to the auditory speech centre. A profound, sudden, destructive lesion such as it must have been, involving the auditory speech-centre, would necessarily entail at its commencement considerable disturbance in the motor vocal speech centre and in the visual speech centre. That these centres (motor vocal speech centre and visual speech centre) were not themselves directly implicated by the lesion is, I think, conclusively proved by the rapid recovery in the power of motor vocal speech and the very marked recovery in the power of reading which were established. When the patient came under my notice the word-deafness was still very complete; but with the exception of some degree of paraphasia the patient could express herself quite well in spoken speech, the only defect being that she occasionally made use of a wrong word and forgot names of objects (slight paraphasia). She could read aloud anything which was placed before her. She could understand short, written sentences which she could not understand when spoken (by the ear). She could express herself in writing, though not without mistakes. The inability to understand complicated sentences and the mistakes in writing which her letters show that she made can be quite well accounted for by the lesion in the auditory speech centre; they do not necessitate a lesion in the visual speech centre. The patient could repeat correctly words and sentences which she did not understand when spoken, and could write from dictation long sentences which she was quite unable to understand by the ear. It is very difficult to explain the fact that the ability to repeat spoken speech (heard by the ear) was retained, considering that the word-deafness was so marked. The most likely supposition seems to be that the repeated (mere echo) speech passed through the right auditory speech centre (instead of through the left auditory speech centre, the usual channel) to Broca's centre in the left hemisphere. Another point of great interest in the case is that for three or four days after the seizure (although the sensorium seems to have been clear) the patient was stone deaf. Absolute deafness is very rarely indeed, as Dr. Hughlings Jackson has pointed out, the result of a cortical lesion. The fact that this patient was stone deaf is suggestive of a bilateral lesion involving both auditory centres, or the fibres passing to both auditory centres. The supposition that the lesion was bilateral (involved both auditory

centres) is perhaps supported by the history of numbness and loss of power in the left hand which ushered in the attack. The patient, it must be remembered, was right-handed, and the chief lesion was almost certainly, therefore, situated in the left auditory speech centre. In the absence of a post-mortem examination it is useless to theorise further on the point. But, so far as I know, it has never been shown that a unilateral lesion involving only *one* centre for hearing in the cerebral cortex can or does produce stone deafness. When the patient came under my notice the power of hearing ordinary sounds was perfectly regained, but the power of understanding spoken language was still very imperfect. The remark which the patient herself volunteered ("Is it not a strange thing that I can hear the clock ticking and cannot hear you speak? Now let me think what that means") is a most striking one and emphasises this difference in a very marked way. After the attack and throughout the whole of the subsequent course of the case the patient's musical power seemed to be completely lost; she could neither sing nor play and did not appear to appreciate music of any kind. The notes of the case are as follows. The patient, a woman, aged twenty-six years, was sent to me by Dr. — on Feb. 10th, 18—, with the following statement as to her previous history:—"The patient was confined on Nov. 22nd. On the eleventh day after delivery she complained of numbness in the left arm, and the nurse noticed that she had difficulty in lifting things with the left hand. This passed off in the course of the same day. On the afternoon of the following day the nurse, who had spoken to her and found her quite well a few minutes previously, was attracted by the sound of her breathing, and on approaching the bed found her in a drowsy condition and unable to speak. When I entered shortly after I found her in a lethargic state, breathing rather heavily, and apparently unable to speak or answer questions. Her eyelids were open, but she took no notice of what was going on around her. On the following day she was found in the same condition, except that she was not so drowsy; she had occasionally followed the movements of those in the room with her eyes. She took no notice when anyone spoke to her. If a question in writing was placed before her she would stare at it for a moment, but gave no indication that she understood it. The loudest noises did not attract her attention. She moved all her limbs freely and took liquid nourishment from a drinking cup when it was given to her. On the third day of her illness she was heard to mention the name of one of her children when he was brought into the room; and for the next three or four days she spoke a word now and again, and afterwards gradually went on to say short sentences more or less correctly. About the third day of the attack she showed that she heard noises, such as the shutting of the door, &c., and also that she understood to some extent *written* questions. She would reply to such a question in writing with considerable intelligence, writing in a good hand but with occasional misuse and mixing up of words. She could also read aloud from a book, with a mistake now and again in pronunciation. It was about four or five weeks after the beginning of her illness before she was able to understand any spoken word. At first she would only pick up very occasionally a single word in the conversation that was addressed to her and would repeat it to herself, but a slow improvement had gone on, and for the past four or five weeks she had been able to repeat with more or less correctness the words of a sentence spoken slowly by another, and to take up its meaning when finished. The pulse and temperature have been normal throughout. The following are copies of two letters which she sent to me; the first was written of her own accord and was a request for a tonic; the second she was asked to send so that I might judge whether there had been any improvement":—

"DEAR DR. —, —I think a little note to let you see and to think it is a little better yesterday. I two notes and ther is a little nonsense read yes I let me to let you know I would like to a deal to make stronger than I was, so I would like now to take more of the housekeeping and take care of the little children so I think you give me if from you so as to make me eating more for I be glad to so a great deal. May I get a little iron do you think? May I get from you just a little to make me something to sleep I allsay seem to think all take me all I am wrong. It reminds thinking all and I dont sleep and then I find the head so stupid too full, and I cannot too many. I am so glad you thinking well. I think you have been *very* kind to me and I am such a kind Doctor. I hope you to glad from us and give you a very Happy New Year and give you from — and I a very kind regards.

"3rd January, 18—.

"————."

This letter was written in pencil in a good hand; the letters were well formed; the punctuation, spelling, &c., were exactly as above.

The following, which was written in ink, shows decided improvement in the power of spontaneous writing:—

"January 24, 18—.

"DEAR DR. —, —I am so glad to think now that you thought that I am improving quickly. How splendid it will be, when I hear you quite well, however I thought perhaps I would never know so much better. Every one has been very kind to us all. How very very many every day you see to the ill ones. How fearfully sad it be must for you and how many getting better too. How *very* good and kind you have been to me. With very kind regards and — join."

The previous history, as ascertained from her husband, was practically the same as that given above. He stated: "For the first three or four days after the cerebral attack she was stone deaf, unable to hear loud noises, such as the dinner bell rung loudly in her room. The first sound which she appeared to hear was a poker falling. She did not understand any single word which was said to her for four or five weeks. During this period she could speak and frequently asked questions, and she could understand short written questions and would answer them quite correctly. When she asked a question she would request that the answer should be made in writing. This was the only way in which she could be made to understand. During this period she was able to write, but in writing she made frequent mistakes. Before this confinement she was in perfect health. She has two other children. Both the previous labours were rapidly and satisfactorily recovered from. She is naturally of a nervous temperament and is at times very much depressed, thinking she will never recover her power of hearing and understanding spoken language. Since she began to regain the power of understanding spoken language I have noticed that when she is nervous or excited or fatigued her ability to understand what is said to her almost entirely disappears. When she fails to understand a spoken question she will often say so, and then ask that it should be written down. She then generally understands it." When I saw her the patient had a distinctly vacant expression. Her general health was now fairly good. She slept well. The appetite was rather poor, the tongue somewhat furred, and the bowels constipated. The heart was healthy. The radial pulse was 90. The temperature was normal. The kidneys and liver appeared to be healthy. She had had a good deal of neuralgic pain about the head. The teeth were bad; they had not been abstracted, for in the weak state in which the patient had been it had not been considered advisable to allow her to have chloroform. There was no paralysis in the face, arms, or legs. The grasping power of the right hand, as measured by the dynamometer, was twenty-five and that of the left fifteen (fairly normal for a woman of her physique who has passed through a long and severe illness). The patient was right-handed. The tactile sensibility in all parts of the body appeared to be normal and equal on the two sides. The knee-jerks were normal. The condition of hearing and of the auditory speech centre, so far as ordinary sounds were concerned, seemed quite perfect. She could hear a watch ticking and the tuning fork at a distance of two or three feet from either ear. At this stage of the examination she volunteered the statement, "Is it not a strange thing that I can hear the clock ticking and cannot hear you speak? Now let me think what that means." A marked condition of word-deafness was present. As has been stated above, she was completely word-deaf for several weeks after the onset of the attack. It was only during the past fortnight that she had answered any questions which had been put to her in spoken language. She could now understand some things which were said to her. She understood best when one word was said to her at a time. She was quite unable to understand a long or complicated question. She could understand some short sentences when the words were very slowly and distinctly spoken. It was often necessary to repeat a word more than once before she grasped its meaning. Often, too, she could only understand the significance of a question when the question had been repeated in a different form—a word of the same significance substituted for one which she could not understand. Thus, when asked very slowly and distinctly, "How old are you?" she answered correctly, after an interval, "Twenty-six." Asked, "When was your baby born?" she answered correctly after an interval, "On November 22nd." She always hesitated a long time and seemed to take much time to think

out the meaning of simple questions before she answered them. When asked, "Let me see your tongue," she made no response, and evidently failed to understand the question. Her husband said that she understood spoken language better when she did not see the speaker—when she was spoken to from a distance and when spoken to quietly and not loudly. He further said that she was able to understand children better than grown-up persons. She herself volunteered the statement to him that they (grown-up people) had too many teeth. Her power of understanding spoken language depended, he said, upon her spirits; it was always worse at night and when she was tired. When asked a question she often echoed the last part of it and then, after repeating some of the words, seemed to understand their meaning (the question here arises whether she did not get information as to the meaning of the words by aid of the ingoing—kinæsthetic—impressions which result from the vocalisation and motor movements attending the production of the words). Thus when asked, "Are you better?" she repeated the word "better," obviously in an automatic, reflex way, then brightened up and said intelligently, "Yes, better." Asked, "Have you any headache?" she repeated the word "headache" in an automatic way, then brightened up and said after hesitation, "Yes, often." Asked, "Are you giddy?" she echoed the word "giddy," then brightened up and said, "No." I subsequently ascertained that after the attack and throughout the whole subsequent course of the case the patient's musical power seemed completely gone; she could neither sing nor play and did not appear to appreciate music of any kind. With regard to the condition of the motor vocal speech centre, a certain degree of paraphasia was present; but with this exception the motor (emissive) faculty seemed to be little affected. She certainly spoke much more correctly (made use of spoken language much more correctly) than I would have supposed from the mistakes which she made in writing (see the letter of Jan. 24th, written a fortnight before I examined her). She volunteered statements, spoke spontaneously, asked questions, and expected to be answered; if she did not understand the answer she asked that it might be repeated, or asked that it should be written down. She seemed to be able to say almost everything she wished to say, but she occasionally made use of a wrong word; for example, she said "My hair" instead of "My skin." Her husband stated that during the early stage of the attack she made frequent mistakes of this kind, and she used to use the word "scarf" for almost everything. He added that the mistakes were chiefly confined to the names of things (objects); very soon after she regained the power of speech she could use the parts of language other than nouns quite well without making mistakes. (In her written speech the mistakes involve all parts of speech, nouns perhaps least of all.) Often when she could not get a word she used to spell it and then pronounce it. In the act of spelling the auditory speech centre and the visual speech centre are both brought into play. Most people spell chiefly by the revival of auditory impressions, though the influence of the visual speech centre is in many persons very active; witness the fact that when doubtful about the spelling of a word many people write it down to see how it looks. In most people both sensory speech centres are called into use. The patient in Case 2, though unable to read, could write quite well, but could not read a single word that she had just written, yet she could spell perfectly. This patient, who was almost completely word-deaf, often when she could not get at the meaning of a word, would spell it out, then pronounce it, and then understand it. As to the ability to repeat spoken language, although she was unable to understand most things that were said to her, she could repeat words and sentences which she did not understand. This was very remarkable and difficult to understand. Further—and this was also very curious—she could write down words and sentences which she did not understand (when spoken), and could then understand them after she had written them. I asked her, for example, the question, "Do you like to come to Edinburgh?" She did not understand it. I then asked her to repeat it after me. She did so without hesitation. I then asked her to write down the words she had just said. She did so without the words having to be repeated a second time, and she then undoubtedly understood the question. At this stage of the examination her husband volunteered the statements that her memory was excellent and that "she repeated what she heard by sound and not by sense." When asked, for example,

"How old are you?" she repeated, "Old are you"; then brightened up, and after an interval said "Twenty-six." When asked, "Have you any headache?" she repeated "Headache"; then brightened up and answered, "Yes, every day," and pointed to her forehead. She repeated after me, "Monday, 22nd," "Where are you?" "Where are you to-day?" and "Are you in Edinburgh?" As to the condition of vision and the visual word centre, her sight was perfect, V. = $\frac{2}{3}$. There was no hemianopsia. The optic discs were normal. The pupils were equal and of medium size. She readily understood short questions which were put to her in writing. She occupied a good deal of her time in reading, but her husband said that she did not seem to understand much that she read; she apparently was unable to grasp the meaning of long and complicated sentences, though she generally had no difficulty in understanding short written questions. She seemed, he said, only to be able to understand one sentence at a time. If she read for any length of time she seemed to get confused and not to be able to understand. She recognised and generally named correctly any object which was shown to her. Thus she named correctly a watch. Asked what a tuning fork was, she said "for music, a fork to sing" (slight degree of paraphasia), made it vibrate and held it to her ear, showing that she understood what it was. When asked to pick out a knife, pencil, and buttonhook from a number of different objects she did so correctly. She named scissors, pencil, and india-rubber correctly. The following questions, which she was unable to understand by the ear (when spoken), she was able to understand when written:—"Can you repeat words after me?" "Say the words 'I say.'" "Do you like to come to Edinburgh?" "Can you write what you have just said?" "What do you call it?" (showing her a watch). "Please shut your eyes and tell me what you hear." "Squeeze it [dynamometer] as hard as you can." "Do you feel quite well when you are touched?" "Please look steadily at my eyes and tell me if you see my finger moving." "Do you see my finger?" "You see my finger quite distinctly in all positions?" She read aloud without any hesitation, correctly, but with a somewhat monotonous expression, the following sentence from a book on my consulting-room table: "No issue of a medical journal would be complete at the present time without containing the latest development in this greatest medical experiment of all time." Her mental faculties seemed to be comparatively little impaired. Her husband said that her memory was very good. She could multiply, add, and subtract figures correctly, but she performed all these mental operations very slowly. The following are illustrations. When asked to multiply 60 by 3, the answer, after hesitation, was written by the patient 180. When asked to subtract 54 from 162 the answer was written by the patient slowly, 108. When asked to add together 122 and 101, the answer written by the patient was 223. The sense of smell seemed unimpaired. When asked, "Can you smell?" she made no indication that she understood the question. Some oil of peppermint was then placed to her nose. She immediately said, "Yes, something like strong sweeties." When asked, "Is it peppermint?" she said, "Yes—taste said to be good." The future progress of the case is told by the following letters:—

" March 9th.

"I think it is about a month since we went to Edinburgh to see you. My husband thinks I can hear a very little better, and I am so glad and thankful and it will be splendid when to be quite better. I have taken two bottles from you have given. I have got very bad with indigestion and with newlalgia in the system. I got from Dr. — antipyrine powders. We think of going to — and I hope the change will be good for me and will be glad if I feel stronger."

I append a portion of this letter in facsimile to show the exact character of the writing (see Fig. 21).

" April 9th.

"Many thanks for your last note. We went to near — for a week, but the weather was very very cold.

"We think I can hear a little better, but the progress seems very slowly and very little of the general conversation.

"I have got still indigestion and so very cold and chilly all through I think from the circulation of the blood.

"The worst of all the pain is newlalgia in my head and I have no toothache. Do you think there is two kinds of headaches, newlalgia and from the forehead so hot and always aching, sometime I think from not enough of blood or too slow, or weakness, and such a horrid feeling of lightness and dazed. I will be so glad when I feel I am better. Sometimes I wonder if I really will be so well as before the illness."

On May 28th her medical attendant wrote to me as follows:—

"Mrs. — (case of aphasia) has not been so well for the past month. After you saw her in February she slowly but steadily improved in the matter of understanding spoken speech, and about six weeks ago if one

spoke slowly and distinctly she took in almost everything that was said to her. She could not, however, take part in a general conversation, but occasionally picked up what was being said by those around her. Her power of expressing herself in writing, as you would observe from the letters she wrote, had also improved very much. All along she has complained a good deal of uneasy sensations and pain in her head. She has also had a considerable disinclination for food and there has been much difficulty in getting her to take an adequate amount of nourishment. About a month ago she commenced to complain of feeling very tired and weak, and also of some pain in the head—across the eyebrows and over the vertex. She took to bed and has not been up since. The pain seemed to be constant, with paroxysms of increased severity, and accompanied by great intolerance of light and sound. There was no paralysis. Sometimes she complained of pain in the left arm and leg, and once or twice of stiffness of her left forearm. The pulse was slightly quickened, from 96 to 100, but regular; the temperature was normal; the tongue was coated and she had a great dislike for food. Examination of the eyes, so far as it could be made, revealed nothing abnormal. About ten days ago she ceased to complain of the pain in her head, but at the same time began to show a great falling off mentally. She has much less power of expressing herself and does not understand what is said to her so well. She is very emotional. Occasionally she rambles a good deal—imagines there are people in the room, that she is not in her own house, &c. She is rather thin, but her general strength is fairly good. The treatment she has got lately has been ice to the head when the pain was bad, blister to the nape of the neck, small doses of iodide of potassium combined with bromide of potash, and frequent feeding. If you have any suggestions to make I will be very glad to hear from you."

And again on Aug. 6th:—

"I have omitted to let you know of the death of our patient, which occurred about five weeks ago. After I wrote you she got steadily weaker. She fell off very much mentally—talked incoherently, understood very little of what was said to her, and had the delusion that she was not in her own house, that there were people in the room, &c. About a week before her death the temperature began to rise at night and ranged from 101° to 103° F., and on the day she died it was as high as 103°. I tried hard to get a post-mortem examination, but failed."

(To be continued.)

FIG. 21.

March 9th

Dear Dr. Kraunwell

I think it is about a month since we went to Edinburgh to see you. My husband thinks I can hear a very little better, & I am so glad & thankful & it will be splendid when to be quite better. I have taken two bottles from you have given. I have got very bad with indigestion & with neuralgia in the

Portion of a letter written by the patient on March 9th (Facsimile).

THE MALIGNANT TUMOURS OF INFANCY, CHILDHOOD, AND YOUTH.

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(Continued from p. 1196.)

TESTIS.

THE malignant neoplasms of the testis, especially those of early life, are remarkable for the great frequency with which heterotopic structures—such as cartilage, striped muscle, unstriped muscle, and epithelial elements, often ciliated—are found in them. Many circumstances point to aberrant elements connected with "rests" of the Wolffian body, lodged in the rete testis, as the germs whence most tumours of this kind arise. It is believed that the junction between the Wolffian tubules and the tubuli seminiferi is brought about by the forward growth of the Wolffian tubules into the hilum. At this stage fragments of the adjacent proto-vertebral matrix, &c., may readily be dislocated and become embedded in the evolving organ, where they constitute the "rests" above mentioned. The difference between the ovarian and testicular development in this respect may be the reason why these heterotopic elements are absent from ovarian neoplasms; at any rate, the ovaries are developed in

just as close proximity to the proto-vertebral matrix as the testes, and were there not some special difference in their ontogeny the former would be just as liable to these heterotopic inclusions as the latter. Of 51 malignant testicular neoplasms tabulated by Curling,⁶⁸ in 5 the disease began under the age of five years and in 1 between fifteen and twenty years. These tumours are occasionally met with at birth and sometimes they are bilateral. They are often described as "cancers," but in reality they are almost always sarcomata, and this is shown by the nature of their metastases. Examples have been met with by Parker⁶⁷ at three months, Hutchinson⁶⁸ at five months, Silcock⁶⁹ at eight months, Depaul⁷⁰ at ten months, Chaffey⁷¹ at eleven months, Louvet⁷² at sixteen months, Schleghtendal⁷³ at eighteen months, Butlin,⁷⁴ Marsh,⁷⁵ and Hertzberg⁷⁶ at two years, Johnson⁷⁷ at two and a half years, Battle⁷⁸ and Neumann⁷⁹ at three and a half years, Jacobasch⁸⁰ at six years, and Ribbert⁸¹ at thirteen and fourteen years. Trélat⁸² has collected 26 cases recorded prior to 1884. In a congenital case of this kind seen by Weber,⁸³ in which cartilage largely predominated, the tumour—which at birth was of the size of a pigeon's egg—increased in the course of fifteen months to the size of a goose's egg. I have seen a case of adeno-myxosarcoma of the left testis in a youth nineteen and a half years old, who died from acute dissemination of the disease sixteen days after castration; when metastatic nodules were found in skin, eye, triceps muscle, both lungs, liver, both kidneys, small and large intestine, and in the retro-peritoneal glands. Edwards⁸⁴ has met with sarcoma of the