appetite for food, and very frequently, though not constantly, vomited what she was able to take. Her most urgent symptom from her admission to her death was the great pain she had in the right iliac region—a pain increased on the slightest pressure, not confined to the spot touched, but spreading down the thigh on the inner side. Latterly, the pain became most intense, and was aggravated by pleurisy of the right side, with subsequent effusion. She died on April 18th, twenty-three days after her admission.

I am indebted to Dr. Foulis, the Pathologist to the Royal Infirmary, for the following report of the *post mortem* examination; and to Dr. Whitaker for the woodcut, which admirably depicts the position and appearance of the tumours.

The abdomen was distended; the legs cedematous. On opening the abdomen, about two and a half pints of turbid yellow fluid was found in the peritoneal cavity. The stomach was contracted, containing a small quantity of yellow fluid. The liver weighed 4 lbs. 7 oz.; the tissues friable. The kidneys were large, weighing ten ounces each. The capsule was not adherent; the surface was smooth and glistening. The colour was pale yellow, mottled here and there with red streaks. On section, the cortical substance was enormously increased; its prevailing colour yellow, mottled with red. The pyramidal substance was of nearly natural appearance. The ovaries were converted into large oval tumours of nearly equal size, six inches long by three inches broad, of a mixed colour, pale salmon mingled with slate colour. The surface was quite smooth, but overlaid in many parts by a layer of firm organised lymph. On section, the surface was smooth and glistening. It was of a mottled yellow and pale brown colour. The fimbriated extremities of the Fallopian tubes were also affected with the same change of structure, though in a much less degree than the ovaries. The uterus was small, not altered. The heart was not abnormal in size. The ventricles were contracted, and contained only a small quantity of a pale clot. In the pericardium were about two and a half ounces of clear reddish serum. In the right pleura were about two pints and a half of turbid yellow fluid; the right lung was compressed against the upper and back part of the pleural cavity. The lower lobe of the right lung was non-crepitant. The left lung was congested. The brain was natural. The spleen weighed five and a half ounces; its structure was soft, and of a dark plum colour. The microscopic examination of the tumour showed a structure of groups and masses of round cells, with a loose interlacing stroma. The structure was that of the round-celled sarcoma.

It will be seen that the structure of the tumour was that of the round-celled sarcoma, which, doubtless, must have increased with amazing rapidity. As previously mentioned, the woman had a child fifteen months before her death, so that the tumours had been formed subsequently to that period. That the tumour in question is extremely rare will be evident from the fact that Rokitsky does not even allude to a case of the kind. Virchow mentions having seen one, and records it as being of the greatest possible rarity, and that it invaded both ovaries. Kiwisch has seen two cases. Of English authors, we find Mr. Spencer Wells, in his last edition of his work, 1872, stating that, until the present year, he doubted their existence, but since then he had seen two distinctly characterised, and taking their origin in the ovarian tissues. In both cases, the right ovary alone was affected. In one case, the tumour weighed nine ounces; in the other, four pounds and a half.

Dr. Wilks, in the *Transactions of the Pathological Society*, vol. x, gives a detailed account of the case of a girl, aged 19, who died under Dr. Addison's care in Guy's Hospital. In this case, the ovaries seem to have been both affected, and the disease also invaded the pyloric half of the stomach. The tumour seems to have been of a fibroid character.

My colleague Dr. Scott Orr has kindly supplied me with the manuscript of a case which came under his care in 1861. It will be observed that, in many particulars, it bears a very striking resemblance to the one I have narrated.

"A poor girl, aged only 18, was admitted into the Royal Infirmary in the winter of 1861. She had only been a few months ill; and yet, on her admission, her abdomen was greatly distended by a large firm swelling, which gave her the appearance of being about seven or eight months pregnant. She was tolerably plump and healthy-looking when first admitted; but soon her sufferings became so great, and she was so wasted with hectic fever and pain, that she quickly assumed the well known cachectic appearance of confirmed malignant disease. I had little doubt from her history that the disease was ovarian, and of a malignant character. On examining her *per vaginam*, however, I was not a little puzzled to find, filling the whole pelvis, a large irregularly nodulated tumour, having the hard scirrhus feel of a carcinomatous uterus. The os uteri was with difficulty reached. It was tilted forwards towards the symphysis pubis. The question now came to be, was the abdominal tumour connected with the supposed uterine swelling, or were there two distinct tumours: the one uterine, the other ovarian. I lean to the latter opinion, believing that such malignant ovarian growths may be associated with like degenerations of other organs. The patient soon sank, and died worn out with exhaustion; and an opportunity was afforded of ascertaining the true condition of morbid parts. One ovary was found loose and unattached, floating among the bowels, enlarged fully to the size of a child's head. The other was not quite, but very nearly, of equal size. It filled the whole pelvis, into which it was pushed down, and pretty firmly attached; and it was its irregular nodulated surfaces which had been felt during life through the vaginal parietes. The structure of the tumours was truly malignant, presenting the soft hair-like character in many places, while in others suppuration had taken place, and in others the hæmorrhagic character revealed itself, as seen in fungus hæmatodes. The uterus was small and contracted, free from disease, but displaced forwards, its os lying as I had felt it during life. It is worthy of notice, also, that the liver was found to be largely infiltrated with cancerous disease.

"These appearances fully explained all the poor girl's sufferings, for they displayed an activity and acuteness of morbid action which could not have gone on without great pain and distress. The early age at which this malignant form of ovarian disease was developed was surely a very peculiar feature in this instance, and it struck me very forcibly at the time, being the only case of cancerous degeneration of the ovary with which I remember to have met."

REMARKS.—In Dr. Scott Orr's case, it is not particularly noted what occupation the girl had; but with regard to my own case, this was very evident. It is probable that the kidneys were first implicated, as their large size and weight abundantly evidence. Albuminuria and a debilitated constitution resulted. Then the girl's mode of life necessitated great ovarian irritation. What part the ovaries play in sexual intercourse, no one can tell; but that they hold an important one, no one will attempt to deny. With a reduced constitution, the woman plied her unhappy calling, and the constant irritation probably originated the form of cell-growth described. The fact that both ovaries were affected materially assists this hypothesis. The woman, it may also be mentioned, seemed, both in her conduct and conversation, to savour more of the lower animal than of the woman. Her talk was such as to disgust nurses and patients; and, latterly, we were obliged to put her into a side room with a typhoid fever patient, who, on the second day afterwards, begged to be placed in the general ward, and to be freed from her society.

ON THE NATURE AND TREATMENT OF ALOPECIA AREATA (AREA CELSI).*

By JAMES H. STOWERS, L.R.C.P.Lond., M.R.C.S.Eng.,
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AMONG the many cutaneous affections met with in practice, there are few, I believe, that have received more attention from the profession of late than the above. Numerous writers have done much to enlighten us as to the true nature of this disease, especially Jenner, Hutchinson,

* Celsus, *De Re Medicâ*, lib. vi, cap. iv.

Rindfleisch, Bristowe, Duhring, and others. Again, in the *St. Bartholomew's Hospital Reports for 1872* (vol. 8), Dr. Dyce Duckworth contributed one of the most able papers that have been written within the last few years upon the nature and treatment of alopecia areata. Much evidence has been adduced on both sides as to its parasitic or non-parasitic origin; but, notwithstanding, the majority of those who have studied the microscopical characters of the altered hairs obtainable in this affection do certainly speak most emphatically, and I believe with truth, in favour of its being independent of any fungus-element. That this disease may occur associated with other parasitic affections—tinea tonsurans, for example—there can be no possible doubt; but the fact of a fungus being but seldom found with true alopecia proves that that alone cannot be the real cause. The bulk of evidence tends to show that it is an abnormal condition dependent upon nutritional changes in the scalp, producing a disturbing influence upon the hair's growth, loosening it in its follicle, allowing its closely arranged fibrillæ to become separated (thus accounting for the swelling in the shaft in the early stage), and rendering the hair so brittle that it either fractures with the slightest touch, or falls away with many others, leaving the characteristic patch. For my own part, I have examined microscopically many specimens of hairs, and have totally failed to find anything suggestive of a parasite. My attention has lately been drawn to two cases of alopecia successfully treated with local stimulants, and published in the *JOURNAL* of November 14th, 1874, by Mr. C. R. Roose. I wish, therefore, more particularly to speak concerning that form of treatment, and to give my experience in its use.

During the period when I was clinical assistant in the dermatological department of St. Bartholomew's Hospital, I had an opportunity of seeing very many instances of alopecia, and in my note-book I have notes of several cases precisely similar to those referred to by Mr. Roose. Without local stimulants, I believe it impossible to produce a cure. Good nourishing diet, and tonic medicines to improve the general health, as cod-liver oil, steel, mineral acids, and nuxvomica, are indispensable; but even these, without a stimulating topical application, are insufficient. At one time, it was my practice to compare the results of certain local remedies, and note the efficacy of each. Among those used were the blistering fluid of the *Pharmacopœia*, tincture of capsicum, spirit of turpentine, and the strong solution of ammonia, alone and combined. It is interesting to note how the scalp, when its nutrition is impaired, the vitality being lowered, will tolerate the use of such powerful applications for a long period, with less irritating effect than in health. The first remedy—the blistering fluid—was used in several cases with a fair result. However, when the disease is extensive, much inconvenience is experienced by the patient from a large vesicated surface; and, moreover, it was found that the result was not better than that of other applications. Tincture of capsicum in the form of a lotion, with glycerine and rose-water, proved useful, but yet inferior to either spirit of turpentine or solution of ammonia.

The relative merits of the two remaining fluids were then noticed. Cases were chosen in which several patches of the disease existed simultaneously upon the scalp of the same patient, that the influence of each remedy could be the more easily compared. A large number of cases were thus treated. The strong solution of ammonia was applied with a small piece of flannel, and carefully rubbed in night and morning until the surface became reddened. At first, the scalp appeared insensible to it, very little smarting occurring. This was repeated daily until the surface became sensitive, and the strength was reduced, or the application used less often. When the scalp became irritable, it was discontinued for a few days. In a few weeks, fine white downy hairs appeared, and gradually the hair normal in character returned. The scalp was ordered to be shaved periodically, to stimulate the hair's growth, and allow the more thorough application of the fluid. The spirit of turpentine was used in the same way.

A careful prognosis as regards time must always be given; for improvement is but slow in many instances, requiring even months before the patient can be convinced that good is being done. If patience and perseverance, however, be exercised, benefit is sure to follow, although it may seldom happen that some of the hair-follicles are so changed and atrophied that their function cannot be restored to normal.

Dr. Duckworth published in the *St. Bartholomew's Hospital Reports for 1873* (vol. ix), the conclusions that we were able to draw as the result of our observations, and I cannot do better than repeat them in his own words. They were as follows.

1. The local treatment by strong solution of ammonia is apparently more satisfactory than that by spirit of turpentine.
2. The renewal of the hair-forming function is probably hastened more by ammonia than by any other local application.

3. Turpentine appears to be only second in importance as a topical agent.

4. The ammonia treatment is, on the whole, less universally applicable in these cases than turpentine.

5. In certain cases—a decided minority—the ammonia treatment cannot be borne because of its severity, *e.g.*, exciting vesication. Turpentine never produces these effects, and is a less formidable agent in all respects.

6. Ammonia may, therefore, be regarded as a valuable local application in these cases.

I will only add that, since the publication of these conclusions, I am able to speak even more highly in favour of ammonia as a curative agent.

A RARE INJURY OF THE SHOULDER-JOINT.

By GUSTAVUS FOOTE, M.R.C.S., Kington, Herefordshire.

ON March 18th, 1871, a man named David Higgins came to my surgery, saying he had fallen down when he was very drunk three days previously, and had hurt his arm. On examination, the arm from the shoulder downwards was found enormously swollen, especially about the elbow, and for the most part hard and brawny; there was flattening of the shoulder. I told him the arm was out of joint, and proceeded to reduce it, which was easily effected, but it fell back immediately into the old place. On a more careful examination, I discovered the upper portion of the shaft of the humerus loose in the axilla, broken off at about the surgical neck; I had merely reduced the broken shaft, leaving the upper end in the axilla. The diagnosis then was, a dislocation into the axilla and a fracture of the bone at the surgical neck occurring at the same moment. Two days later, my friend Mr. Garrard saw him; and, after a long and careful examination, he agreed with me as to the nature of the accident. The treatment I adopted was merely to make sure that the ends of the bone should be kept in apposition, and to place the arm in a sling; the object being to cure the fractured humerus, and promote the formation of a false joint under the coracoid process of the scapula. The swelling gradually subsided, the bone readily united, and a fairly good joint was formed. The patient was able to continue his employment as a mason, having free use of his arm; he could not, however, raise it upwards so as to bring the hand above the head.

I did not see the man again until September 5th, 1874, three years and a half after the accident. He was then suffering from alcoholism; the symptoms being general paralysis and vital prostration. As he had no home, I had him conveyed to the infirmary at the union house, where he slowly sank, dying on the morning of the 10th. A *post mortem* examination was made twelve hours afterwards. The arm presented an appearance of dislocation downward into the axilla. An incision was carried from above the acromion process down the arm, to below the insertion of the deltoid, which appeared wasted, then across the upper part, and the bone was completely exposed by dissection. A singular condition of things was discovered. There had been fracture of the humerus at the anatomical neck and at the surgical neck of the bone; the head of the humerus was still in the glenoid cavity, and its attachments were firm. The lower end of the loose fragment had become united most accurately with the shaft, and the upper extremity had formed for itself a very good false joint, the cavity being formed by the under surface of the coracoid process, and the corresponding portions of the second and third ribs. At the point of union between the two ends of the bone on the outer side, callus had been thrown out, and a bony union had been formed with head of the bone still in the glenoid cavity. There were in fact two joints, the false and the true one. While *in situ* the arm could be moved freely in any direction, except upwards. The diagnosis proved to be nearly accurate, for practical purposes quite so. The only way in which I can account for this singular accident is by supposing, that when the man fell down the shoulder must have struck against a smooth projecting stone in the road.

The only case at all similar that I can find recorded is one mentioned by Sir Astley Cooper in his treatise of *Dislocations and Fractures*. A Mr. Blackburn fell from his horse and was declared to have dislocated his shoulder. It was not until after his death that the real nature of the accident was discovered; it was then found there had been a dislocation of the humerus, with a fracture at the anatomical neck; the detached head of the bone had become fixed by osseous union to the inner edge of the coracoid process, and the upper end of the shaft had formed a good useful joint.