

monary congestion. Now this lowered nervous energy and accompanying vascular depression was the very condition of the body that favoured the invasion of pneumonia, whether dependent upon exposure to cold, or to the direct invasion of the bacilli of influenza. This same condition of lowered vitality, I believe, accounts for the large number of cases which assumed from the first a typhoid character, many patients succumbing to the disease within the first six days. A brief history of four cases, all occurring about the same time, during the height of the epidemic, will illustrate this point.

CASE 1.—J. B., aged thirty-nine, married, a joiner, had been suffering for some days from symptoms of influenza. On Feb. 6th he came home feeling very ill and having had shivering attacks. During the night he had an epileptic seizure. The next day his temperature was 102°, pulse 116, and respiration 62. The following day he was much worse, had muttering delirium, his tongue was dry and brown, and he sank rapidly, dying on Feb. 11th. Here the whole posterior aspect of the right lung was dull, there were extensively distributed bronchial râles all over the chest, and the expectoration was markedly sanguineous.

CASE 2.—This case was similar in character to Case 1. Mrs. R., aged sixty, of good physique and previously healthy, was taken ill on Feb. 17th. On the 19th I was called in. She was in a prostrate condition, her tongue was dry and brown, her breathing rapid and shallow. The right lung, back and front, was dull, moist râles were heard all over the chest, and there was some, and had been considerable, blood-stained expectoration. She never rallied, and died on Feb. 22nd, the fifth day of her illness.

CASE 3.—On March 20th I was called to see E. S., a middle-aged man, habitually intemperate. He had his initial rigor the previous day. When seen, his temperature was 104.5°, pulse 140, respiration 36. He sank rapidly, and died two days after with muttering delirium and profuse sweating. The right lung, back and front, was dull throughout.

CASE 4.—This case was that of a man, J. F., aged twenty-nine, of fine physique, but very stout, weighing 16 st. He was abstemious in his habits and temperate. He got his first chill on March 21st. He had troublesome cough and much expectoration of sanguineous phlegm. Pneumonic crepitus was extensively heard all over the left lung, and moist râles diffused all over the chest. The following day his temperature was 102.6°, pulse 122, respiration 36. His countenance wore an anxious look, and his complexion was cyanotic. Towards evening he raved much. During the next three days his temperature varied from 100.2° to 101.2°; his respiration remained usually at 40, but his pulse rose gradually from 130 till (on the 27th) it was nearly 150, his temperature on the evening of that day rising to 104.6°. About 8 P.M. he died. Towards the end there was profuse sweating, and during the last two days there was some pericarditis. His tongue all through his illness was hard and brown down the middle, with cream-coloured borders.

Such cases as the above were unfortunately common during the height of the influenza epidemic, and bear out my remarks as to the very low standard of vitality that was characteristic of that epidemic. Another very remarkable circumstance, exemplifying the general tendency towards pneumonia at this period, is the very great frequency with which, while attending a patient for influenza, I have discovered a small patch of pneumonia generally about the base which did not seem to produce any marked general symptoms, and which generally quite cleared up in a few days. Several cases of this class I have notes of. But while these cases were frequent enough, there was another class, fortunately not nearly so numerous, but vastly more serious. I allude to cases where there has been undoubted pneumonia, but from the very first assuming a subacute form, the temperature rising rarely above 102° and generally not much above 100° or 101°. Of these cases I have very careful notes, showing their very protracted course and generally unsatisfactory results. Many of these patients I could with difficulty keep in bed; they had no troublesome symptoms in many instances, but there remained obstinately a dull patch of pneumonia, occupying generally the base, but not unfrequently the apex, and which would not resolve. One case of this sort, commencing with pneumonia of the right base, ran a long and weary course and terminated some months later in phthisis. Another commencing with extensive dulness of the anterior portion of the right middle lobe, with expectoration of bloody sputum, but with only from one to two degrees

of fever, after a lengthened illness, during which the entire right lung became involved, eventuated in abscess, and is still under treatment.

Cases, relatively so numerous, point to a species of pneumonia distinct from the classical type, and which, for want of a better name, I would call "influenza pneumonia." Again, I would direct attention to the unusual tendency towards complications which marked all the cases of pneumonia during this period. Amongst these, all occurring in private practice, I find the following complications, parotiditis, phlebitis of femoral vein, pericarditis, pleurisy, and abscess. I would also direct attention to the character of the sputum, which has been more sanguineous than typical pneumonic sputum. This I have noticed just as often in cases of a subacute type, and it seems to be dependent upon an unusual degree of pulmonary congestion. On the question of the infectiousness of epidemic pneumonia I have little to say. My experience of the late epidemic points out only two cases where the occurrence of the disease could be in this way explained, but the evidence of infection in both these cases was undoubtedly strong. On Feb. 22nd a patient died of a peculiarly malignant type of pneumonia, and on the same day her son-in-law, who lived next door, and was frequently in and out of her house, got his initial rigor, which was followed by a severe attack of pneumonia. Again, in a house in Meersbrook a woman lay sick with pneumonia, and her life was for a time in great danger. During her illness a lodger who occupied a bedroom next to hers was attacked with pneumonia, from which he died after an illness that lasted over six days.

There is just one other point which I should like to mention in connexion with the epidemic in question, and that is the comparative immunity enjoyed by children up to about twelve years of age. I can only explain this by their similar immunity from, at all events, severe attacks of influenza.

Sheffield.

PERSISTENT DANDRUFF, ACNE, AND THE SEBORRHOEA OF UNNA.

BY EDWARD BLAKE, M.D.

PART I.—PERSISTENT DANDRUFF AND THE SEBORRHOEA OF UNNA.

BEFORE leaving town for my usual summer holiday I observed in the correspondence columns of THE LANCET a request for a cure of obstinate dandruff. If your correspondent should chance to see this somewhat tardy reply, it may interest him to hear that some months ago I was made acquainted with a method of meeting this troublesome disease by a medical friend, Dr. Shulldham. I must admit that the plan has proved to be a remarkably successful one. Cases which had been running a tedious course of years' duration untouched by ordinary treatment have, provided the heart action be good, shown marked improvement ere a week has elapsed, and have soon after reported a cure. This question of dandruff is not quite so simple as we might suppose. Its natural history, whilst full of interest, is really very complex. There is still a great deal to be learned as to the precise pathology of various forms of dandruff; on the other hand, the researches of Unna of Hamburg have thrown a large amount of light on the subject, and have at least taught us how much there is still to be known about this much-neglected disorder. To Unna, I believe, belongs the credit of first pointing out that dandruff is essentially parasitic, and therefore contagious. This has been confirmed in the fullest manner by excellent clinical evidence. There seems to be little room for doubt that scurf does not usually appear spontaneously, that it is conveyed from a definite source. The hairdresser's brush and the toilet accessories of hotels, clubs, &c., are probably frequent offenders amongst men. With the other sex a possible method of convection is as follows: A maid-servant uses her mistress's hair brush, and after a certain lapse of time the lady's scalp begins to itch, especially along the line of parting. From the mother it does not take long to spread to the children. It is possible that a microphyte may actually enter the sebaceous follicle belonging to a hair-sheath, setting up the severe irritation and its accompanying phenomena, to which Unna has given

the name of "seborrhœa." But the following course appears to be more probable. A given person labours under a certain dyscrasia, often associated with an indolent heart action. In this state the sebum thickens from a fluid oil to a solid fat, as it does in acne. The orifice of the follicle becomes blocked with this fat and with accumulated epithelial cell débris. An appropriate nidus is thus formed for the retention and elaboration of the microspore, the clinical sign of its nidation and development being intense itching. The sebaceous secretion from this time grows more and more dense and consistent. Degenerated epithelium cells are proliferated with great freedom, and at last the formation of sebum is altogether abolished. After this three sequent phenomena may be recognised:

1. The hair grows dry, harsh, and brittle, owing to the arrest of secretion of the normal sebaceous material.
2. The copious production of epithelial scales in and near the mouth of the sebaceous duct leads to great accumulation round the hair, which, compressed and strangled, soon breaks off. The third and last process is as follows. Vast accumulations of imperfectly formed and badly elaborated epithelium scales, having first filled the cavity of the root sheath, begin to protrude from it in the form of a domed hillock, brownish-grey in colour. These can be readily detected in advanced cases by the unaided eye. These camel-coloured hillocks are formed of diseased epithelium scales, loosely held together. When scattered by the nail, applied to relieve the itching, or by the hair brush, they form the bran-like material commonly called "scurf." These scales may themselves be the carriers of contagion. We often find them spread over much larger geographic areas amongst the gentle than we do with the simple. Among ladies they are soon removed and freely disseminated by diligent brushing. I have seen them deposited on the outer portion of the eyebrow, and it may occasionally be seen that the hair of that part has perished. The intermammary region is a very common site. Again, they are sometimes arrested in their downward course by the prominent upper portion of the breast, where the crescent of brown patches which they give rise to may be mistaken for pityriasis or for chloasma. This condition is sometimes called "lichen circumscriptus." The brown spots are frequently seen on the shoulders and in the interscapular area. Many gaps in the minute pathology of this much-neglected disease remain to be filled up, but enough has been said to show that there is no royal road to the cure of dandruff. To be able to cope successfully with this complaint it is needful to study its natural history. Dr. Shulldham's treatment is as follows: The head should be first well washed with hot water and alcohol soap. Alcohol soap consists of two ounces of pure soft soap, half an ounce of rectified spirit of wine, and ten minims of oil of lavender. This formula seems simple enough, but it is very difficult to get this soap properly prepared. One reason for this is that a large amount of cotton oil is now introduced into this country, and sold with the addition of a little olive oil as "best Lucca." The soap is afterwards carefully washed away with plenty of hot water, and the head is then thoroughly dried by means of a warm soft cloth. When the head is quite dry, a glycerole of tannin, strength from ten to thirty grains to the ounce, according to the gravity of the case, should be freely and firmly rubbed into the scalp. If tannin fail, resorcin may be tried, but the tannic acid generally does the work. This process should be repeated once, twice, or thrice a week, as the symptoms may require. After the total removal of the dandruff, a daily dressing with carbolic oil favours the growth of fresh hair: ten grains of absolute phenol, one drachm of oil of cinnamon, and one ounce of olive oil. Warm together and decant off. Apply freely every day.

PART II.—ACNE, AND ITS RELATIONS WITH INTRACTABLE DANDRUFF.

I come now to a matter of extreme interest; it is the method of removing recurrent acne pustulosa—a confessedly obstinate, and certainly a most disfiguring, disease. I have shown that scurf may be an acquired disease of contagious character. Though we might have a suspicion that the parasitic pathology of the new Hamburg school may greatly modify, even if it fail to revolutionise, modern cutaneous medicine, yet the whole matter to many of us retains some of the characters of a startling novelty. It has not hitherto, as far as I can ascertain, been thought that any clinical relationship could exist between scurf and pustular acne. Yet there seems to be some ground for suspecting such a

connexion, as I shall presently seek to show, by giving the history of two exceedingly suggestive cases which I have been recently watching, and whose details I will briefly narrate.

CASE 1.—I had treated for two years a lady aged thirty-five for recurrent acne pustulosa of the back. She was a tractable patient, and submitted loyally to strict diet rules. All the pustular remedies that I had ever heard of were given, and the result was "a brilliant failure." I called to my aid a distinguished skin specialist, and followed his directions scrupulously; but, alas! with an equally unsatisfactory result. At this stage, acting on the advice of Dr. Shulldham, without any reference to the acne, but with a view to removing a dandruff which threatened baldness, I applied alcohol soap, followed by glycerole of tannin. The result was most instructive to me. With two applications per week the scurf, which was a very old business, soon disappeared, and to my great surprise the dorsal pustular acne went with it.

CASE 2—Soon after this a physician of forty-eight years of age consulted me as to whether anything could be done for his baldness. He stated that he did not see why he should have alopecia, as his family did not become bald even in advanced life. Dr. Shulldham kindly examined him with me. We found the scalp freely movable. Hair, otherwise healthy, was very thin along the parting. There was a history of intense itching in that locality five years ago, and after that the baldness began to set in. This irritation subsided under the use of carbolic oil, but the hair was not reproduced. He continued to use the phenol ointment, as without it so much scurf was generated. His back was decorated with pustular acne and with a great number of scars of former spots (acne indurata). He volunteered the information that four days' indulgence in fat ham would always be followed by a pustule on the face. This apparently unimportant observation as to the relation between acne and the absorption of a carbo-hydrate undergoing a slow process of oxidation supplies, as presently will be seen, a very important link in the evidence for elucidating the life-history of acne pustulosa. A form of treatment was adopted in this case resembling that employed in Case 1, and with similar satisfactory results. The scurf disappeared, and with it went the acne pustulosa of thirty years' duration. This was without internal treatment in either case.

Now, let us ask, what was common to these two cases, and what was the *rationale* of their cure? In both there was old existing seborrhœa, dating probably from puberty. This catarrhal condition of the sebaceous follicles of the scalp affords an appropriate nidus or supplies suitable soil for the micrococcus or the microphyte which induces dandruff. The methods of growth and of distribution have been already considered. The dandruff is distributed by the comb, the brush, and the finger-nail, carrying with it the peculiar causative microphyte. Where it encounters the oily or viscid material oozing from a sebaceous follicle about to pass into the comedone stage it is mechanically detained, and if not disturbed by hot ablutions, by vigorous towelling, or by the manœuvres of the Turkish bath, it sets up a specific irritation known as acne papulosa. It is through the presence of bacteria the sebum decompose and break up into a variety of volatile principles and of fatty acids, some of these being possessed of a horribly fetid odour, the resorption of these acts, like the butyric and other acids of the ham fat, by inducing suppuration or local sphacelus with a development of the usual staphylococci, streptococci, and allied organisms found in abscesses. Papular acne is most common, as pointed out by Dr. Frank Payne,¹ on the parts formerly endowed with hair, but now, possibly through evolutionary changes, bereft of it. It is found, as I have myself observed, on the fixed points of the skin, whilst it is rarer on the mobile portions. It is unknown under the chin, and this is especially noteworthy, for that region is protected by the projecting jaw from the impact of scurf scales descending from the hairy scalp. It is an old clinical observation that fat introduced into a stomach deficient in vitality is prone to produce the exciting cause of pustular acne. For example, it follows, in certain people, indulgence in rich pastry and old cheese. That the disturbing element is an acid seems likely from the great success that sometimes follows the use of free doses of the alkaline salts. We know that other

¹ See an admirable post-graduate lecture on Acne, a résumé of which may be found in THE LANCET of Feb. 15th, 1890, at p. 339.

carbo-hydrates, besides those already named, are credited with the power of setting up acne of the pustular type. Among these, the commonest are malt liquor and sugar, especially when their ingestion does not follow out-door exercise. With regard to the malt liquors, there is of course another possible explanation of the occurrence of acne. It is the introduction of sulphur and its compounds. There are at least three methods by which sulphur may be introduced into beer. The hops are dried whilst exposed to the fumes of nascent sulphurous acid; barrels are washed with calcium sulphide to freshen them, and the best beer-making waters, as those of Burton, are rich in the same salt. As we have to deal with two contributory causes of acne pustulosa, seborrhoea as a predisposing and scurf as an exciting cause, the question arises, Shall we attack these (a) in their chronological order, (b) together, or (c) in reverse order? The practical rule appears to be to destroy the dandruff first, then see to the seborrhoea. Acne punctata may be removed by means of an ammonia soap which I devised ten years ago for the purpose. Its composition is as follows:—From ten to thirty minims of liquor ammoniac (according to age), one drachm of ether, one ounce of soft soap. To be kept air tight. First foment a small portion of the skin with very hot water, then apply the soap firmly with the ball of the thumb, as if cleaning off varnish from an old oil painting, and very quickly wash away all vestiges of soap. Great care must be taken in using this soap on sensitive parts or on delicate skins, else pretty severe erythema may be set up. Careful dieting, total abstinence from every form of alcohol, sharp out-door exercise, hot bath, Turkish or electric baths, assist matters. Systematic lung hygiene—i.e., enforced expiration followed by prolonged pernasal inspiration, brisk towellings, general effleurage or skin rolling, sedulous avoidance of excitement, of ices, and of cold beverages, no sea bathing, and the exceptional use of the cold bath, soft woollen clothing, &c., and the employment of sulphur or arsenic as internal remedies according to indications—these are the main outlines of treatment, to be modified by the special exigencies of individual cases.

Berkeley Mansions, Hyde-park, W.

TWO INSTRUCTIVE CLINICAL CASES.

By JAMES OLIVER, M.D., F.R.S. EDIN.

CASE 1. *Intra-uterine pregnancy; delivery normal.*—Jane L—, aged thirty-seven, and married fifteen years, has had seven children and no miscarriages. The last child was born in April, 1887. It was suckled for twenty months. The patient became “unwell” for the first time after this confinement, when the infant was twelve months old, April, 1888. From April, 1888, until November, 1888, menstruation recurred regularly every month, and was of the usual amount. She was not, however, “unwell” in December, and, thinking it was probable she might be pregnant, she weaned the child. The catamenial discharge appeared again towards the end of January, 1889, and continued for the usual number of days (five). Towards the end of February she was again unwell, and this hæmorrhagic discharge continued during the whole of March and the first fortnight of April, ceasing occasionally for two or even three days. The patient was seen by me on Aug. 1st, and stated that she had not been unwell since the 14th of April. She further stated that she had felt the movements of the child on April 22nd (Easter Monday), and that she had continued to feel the movements until a month ago (some time in July). Eight days before I saw her (about July 24th) the patient began to experience pain in the left side and in the back, coming to the front like “labour pains,” and thinking labour had actually begun she sent for her doctor. On Dec. 30th, 1889, the patient was delivered without the slightest trouble apparently of a full time and living child, a boy. In this case, if we allow 275 days for the duration of pregnancy, the patient must have conceived about March 30th, and yet the catamenial discharge, with the exception of two days, continued during the whole of March and the first fourteen days of April. Besides, quickening was felt on Easter Monday (April 22nd), and, as the woman was already the mother of seven children, this announcement demanded consideration. Taking all the facts and physical signs into consideration, I advised watch-

ing; this was done, and the result was a full-time and living child on Dec. 30th.

CASE 2. *Extra uterine pregnancy; delivery by abdominal section.*—Clara M—, aged thirty-seven, and married sixteen years, has had five children and one doubtful miscarriage. The last child was born twelve years ago. The doubtful miscarriage is supposed to have taken place in April, 1889. The history given in regard to this occurrence is that the patient had not been unwell for eight weeks; thereafter a hæmorrhagic discharge appeared, and continued for seven weeks, ceasing altogether on May 4th. Prior to this amenorrhœal menstruation had recurred regularly every month. About May 26th there was discharge of blood for two days. From May 28th till Christmas the patient was the subject of complete amenorrhœa again. On Christmas Day the catamenial discharge reappeared, and continued for eight weeks. The hæmorrhage ceased about Feb. 7th, and thereafter the patient was not unwell again until April 24th, when the discharge appeared, and continued for six days. The patient began to feel movements in October, and these were felt as plainly as they had ever been felt during any of the previous pregnancies, and they were felt continually until two days before Christmas, since which time they have not been felt at all. As the uterus slightly enlarged was felt closely incorporated with a swelling on the left side of the pelvis, and which swelling extended to above the umbilicus, it was decided to open the abdominal cavity. On May 1st the abdominal cavity was opened, and a full time foetus (dead, but not decomposed) was found in a thick sac located in the left broad ligament. The left Fallopian tube and uterus were both well defined; the left ovary, however, could not be detected. In this case the foetal movements were distinctly felt by the patient in October, and from that time they were continuously felt until two days before Christmas. The child removed by abdominal section appeared to be a full time child, and it is quite probable, considering the contents of the sac in which the foetus lay, as well as the character of the inner wall of the cavity and the appearance of the placenta, that the child had died soon after Christmas. This being so, what was the probable date of conception? Here, again, if we allow 275 days for the duration of pregnancy, and calculate back from Dec. 30th, say, which by chance happens to be the day on which Case 1. was normally delivered (see above), conception probably took place about March 30th, and this date corresponds somewhat closely with the amenorrhœa of eight weeks prior to the hæmorrhage which occurred in March and April, and which, it is stated, ceased about May 4th. The miscarriage, therefore, which it is supposed took place in April was most probably not a miscarriage, but an intercurrent hæmorrhage dependent upon the presence of a developing ovum in the left broad ligament. This patient had never experienced any pain like labour, although she had complained more or less of pain in the lower abdomen ever since May.

Gordon-square, W.C.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CLUBBING OF FINGERS AND TOES.

By ANGEL MONEY, M.D., F.R.C.P.

Is venous congestion the chief cause of clubbing of the fingers, toes, nose, ear-lobules, lower end of the spinal cord, and the most distal extremities of the circulation? Text-books are silent on the relationship between clubbing and cyanosis in congenital heart disease. An average statement is: “Clubbing of the fingers and toes is very characteristic” of morbus cœruleus.

A female child, aged ten months, died with acute paralytic dilatation of a congenitally diseased heart. It was exceedingly blue at all times, and had been so from one day after birth. Screaming notably increased the blueness, perhaps partly because screaming and kicking increased the poverty of the oxyhæmoglobin. But to the point at issue. No trace of clubbing, and cyanosis of ten months' duration. Necropsy revealed entire absence of the ventricular septum.