calm. I held the tracheal incision wide open for some minutes, occasionally irritating the back of the trachea with a probe to cause a fresh cough, which had the effect of bringing out some more shreds of membrane. Finally I introduced a small silver tracheotomy tube, and secured it with tapes round the child's neck, after which the child woke up from the chloroform with a peaceful smile, and was placed in bed, breathing easily and quietly. As a rule, I now use the old-fashioned silver tracheotomy tube, with an inner one to remove for cleansing. If the case is going to do well, as will be indicated within the first twenty-four hours by the secretion being loose, muco-purulent, and copious, it does not matter what the tube is, and the simpler the better. If it is going to prove anxious and doubtful, as evidenced by the secretion being viscid, tenacious, inclined to dry and block up the tube, indicated by the well-known whistling sound in the tube, then any complication in the construction, as splitting or jointing to facilitate introduction, just offers so many points to which the viscous fluid adheres and soon becomes converted into a tough obstructive pellet.

The parents were instructed how to keep the tube clear. Nourishing food, milk, and soup were ordered; a plentiful supply of fresh air in the room was secured by causing the fire to be kept blazing, but not too warm, and the window to be kept open at intervals, the child being protected from a draught by a screen placed between the window and the head of the bed.

I have long ago given up the practice of keeping the child in a steam bath by a jet of steam from a kettle or other utensil, introduced under curtains arranged like a tent over the bed, and I am quite surprised to see in some places "tracheotomy cots" with tents over them for this purpose. I am perfectly certain that fresh air, properly heated by an open fire, is far more refreshing for the poor little child than the kind of atmosphere which exists within one of these tents. Even the attendants cannot remain very long within the curtains without coming out for a breath of fresh air. Theoretically, air moistened with steam is better for the lungs than dry air. Practically, I have found that warm fresh air gives better results.¹ If the secretion tends to become viscid and dry, the amount of moisture produced by steam from a kettle or boiler diffused through the surrounding air is of no avail to soften the plug. But I have found that this can be accomplished in part by placing over the mouth of the tube a bit of honeycomb sponge wrung out of hot water, and for the removal of the pellet a soft feather dipped in tepid water used as a mop to brush out the tube; this I have often known to be of great service in removing tough pellets. The whistling sound to which I have alluded causes anxiety from quite another source—viz., it is almost always caused by fresh inflammation, dryness, and viscid secretion further down the trachea: in fact, it may be looked on as evidence of spread of the disease from the trachea down into the bronchiæ. I have known a number of cases where recovery took place after this whistling sound was heard, but it always causes me the greatest anxiety.

In the case here related the recovery was uninterrupted and rapid. The tube was kept in as a precaution for eight days, and thereafter convalescence was rapid. I have now performed tracheotomy over sixty times with the result of saving the life of one out of every two and a half operated on; and the proportion of cures to operations has risen during the last half of my cases, owing, I believe, to rigid attention to the diagnostic signs alluded to in this paper.

Glasgow.

ACUTE RHEUMATISM COMPLICATED BY A BULLOUS RASH (PEMPHIGUS?).

By F. L. BENHAM, M.D., B.S., M.R.C.P.

THE following is a curious and, I believe, rare example of a somewhat unusual form of skin disease, occurring in the course of rheumatic fever, and apparently a part of the disease.

G G—, aged twenty-five, a man of short stature and not very robust constitution, had had an attack of rheumatic fever four or five years ago, which lasted five or six weeks, and had left some disease of the mitral valve. He had remained well ever since until the present illness. He had been ailing

for the previous week or two, but had gone to his work in the City every day as usual. On returning home from work on Saturday evening, March 21st, 1885, the weather having suddenly become cold and wet, followed in the night by a fall of snow, he complained of pains in his limbs and became feverish. The pains got rapidly worse; he grew very restless, and went to bed, but could not lie there long together, preferring frequently to sit up, owing to severe pain in the back. This state continued much the same for the next three days. He was sleepless and even delirious at night.

The man was first seen by me on March 25th, and was then found in a state of active fever, with intense pain and distress. Temperature 102.5°; pain and swelling of all the joints of the limbs; copious perspiration; no rash on the skin, except some spots of acne on the face. A slight mitral systolic bruit was present. He was ordered to lie between blankets, and, after a purge of calomel and jalap, to take a mixture containing twenty grains of salicylate of soda and fifteen grains of bicarbonate of soda every four hours.—March 26th: Bowels had been moved once. Patient slept better last night than before, and was not delirious. Arthritic pains much less, and the perspiration very profuse.—27th: Temperature 101.4°. Rheumatic pain and swelling of the joints almost gone; copious sweating, especially on the face. A peculiar eruption has appeared, consisting of large, pale, soft, blunt, conical papules, the size of large peas, situated over the pectorales, backs of hands, inner sides of knees, and above the ankles. On the first appearance of the rash it bore much resemblance to urticaria, but the wheals did not vanish and reappear. Instead of this they were persistent, and gradually became broader, flatter, less raised, and bright red; it might now be called erythema papulatum, extensively distributed. To repeat the powder and mixture every six hours.—28th: The rash has spread all over the body; many of the oldest papules have become broader and flatter, the size of shillings or florins; the largest had quite subsided in the centre, the skin there being normal and surrounded by a more or less perfect raised red ring. The eruption was accompanied by a good deal of itching. Over the lower lip were patches of closely set vesicles like herpes; there were also large vesicles on the pinna of the right ear, and a very large bleb, nearly the size of a pigeon's egg, over the right elbow (patient lay chiefly on his right side); the rash was very abundant over the back, abdomen, and thighs, down to the knees and even below, but has quite disappeared from the backs of the hands. Temperature 101°. Tongue thickly coated. Rheumatic symptoms had quite left the joints, and the patient had slept better.—29th: In the same condition. No fresh papules, but more vesicles, large and irregular, on the face, especially the forehead. They had no inflamed base, and the contents were clear yellowish serum. On the trunk the red discs had come to form slightly raised narrow red rings, and often coalesced to form circinate shapes (erythema annulare and gyratum). The itching, which had been troublesome all along, was now less.—30th: Temperature normal, no articular rheumatism remaining. There were some large irregular low bullæ on the summits of the larger papules over the buttocks &c.; a few more vesicles on the face, others drying up, but none changing into pustules. For the next few days, subsidence of the rash slowly went on.—April 1st: Salicylate of soda replaced by mixture containing quinine and arsenic. The tongue became cleaner, though the bowels were always confined. Some solid food was allowed.—4th: Vesicles drying up; some burst, leaving superficial sores, which formed the patient's chief discomfort. The general eruption was reduced to a mere roseola, but a large bulla remained for several days at the umbilicus, and there was a vesicle on the side of the tongue. A slight return of the rheumatism took place in the finger-joints of the left hand.—6th: A fresh crop of large irregular blebs appeared yesterday, and to-day on right thigh and knee and left buttock. Patient feels very weak. Temperature 100°; tongue clean; bowels confined.—7th: Slight return of rheumatism. Salicylate resumed.—13th: Temperature normal; tongue clean again. Some more blebs on thighs, and sores still remaining on buttocks.—20th: A few small blebs have come out from time to time, especially over the thighs; sores on feet and buttocks slowly healing. The patient was now practically well, and was able to walk as soon as the sores healed. Saline aperients were given for some time, on account of constipation; and meanwhile he recovered strength. There appeared to be no increase of the valvular disease during the attack. He remained well for some months, and then had another slight attack of rheumatism.

¹ Vide Dr. Ranke of Munich, Trans. Internat. Congress, 1881.

Remarks.—The interest of this case lies chiefly in its rarity, no description corresponding to it being found, as far as I know, in works on medicine, either under the headings of “acute rheumatism” or “cutaneous diseases.” The best account, I believe, is in Trousseau’s lecture on Erythema Papulatum; but in the cases there narrated the rheumatic symptoms were slight and subsidiary to the eruption: in them, also, the eruption was less extensive and less severe, though he speaks of vesicles being sometimes developed on the top of the papules. Though in this case, unlike those of Trousseau, there was nothing like erythema nodosum present, yet it shows the intimate connexion between E. papulatum and rheumatism, and, moreover, the metastatic character of the skin affection, which alternated with the articular symptoms. The special feature to be observed, however, is that, besides the ordinary phases of development which the erythematous papules passed through, in this case it was the rule for them to pass on to distinct well-formed bullæ, having all the characters of pemphigus. Why should the case, therefore, not be regarded as one of acute pemphigus, in the existence of which Hebra disbelieved? Or if authorities on skin diseases (delighting in endless distinctions) object to this identification, perhaps the most appropriate title for it would “erythema bullosum,” as a variety of erythema multiforme. Lastly, it may also be noticed as a somewhat uncommon feature of acute rheumatism that the symptoms set in suddenly with great severity, there being delirium (if the account given by the patient’s friends is correct) on the very first night of the illness.

Note.—Since writing the above, I have come to think that the case might be reckoned as an instance of Bazin’s “hydroa,” though the symptoms do not exactly correspond; but I should regard it, all the same, as a species of erythema multiforme.

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A PRACTICAL HINT ON THE PERFORMANCE OF TRACHEOTOMY.

By W. LEONARD BRADDON, F.R.C.S.E. (EXAM.)

UPON looking through various text-books and articles upon this operation I can find nowhere any instance upon the following detail—one important, as I believe, at any rate to operators of not large experience, and valuable, as increasing greatly the facility, and therefore the success, of the operation. The operator is usually recommended, standing preferably on the right side of his patient, after first determining the exact relation of parts, to fix the trachea with the left hand, the fingers on one side and the thumb upon the other, at the same time stretching the skin at the site of incision. The direction is at least distinct, but the manipulation is usually in effect very different. In all of many cases which I call to mind there has been a little (the only) trouble in the operation, and in some, considerable danger, delay, or anxiety, consequent upon the way in which the attempt is made to keep the windpipe steady, as customarily taught and performed: four fingers on the left side and the thumb upon the right side of the larynx press with more or less force immediately backwards to hold the organ in place, with the effect of considerably aggravating the dyspnoea (especially if an anæsthetic is not being employed), of flattening the pipe against the vertebral column to some extent, of in all cases increasing the depth at which the part to be incised can be reached, and frequently of failing to secure fixity of the larynx, which, likely to move with the slightest change of pressure, is pushed still more out of reach by the increased pressure made to secure it. Any or all of this inconvenience is the result of pressing backwards with the fingers placed upon the skin immediately on either side of the windpipe.

The suggestion I have to make, and which, I have no doubt, many surgeons have long ago thought of or adopted, although hitherto I have never seen it noticed, is so simple as to provoke a doubt as to its value, but anyone who tries it will, I think, find it so effectual in practice as to have no more doubt than I have as to its advantage. Let the surgeon place his left hand, as widely expanded as possible, over the neck of a child in the position for tracheotomy; then resting the fingers upon one and the thumb upon the other side firmly upon the skin, as far to the side of the neck as they will reach, gradually draw in the thumb and fingers, and the

skin (and loose tissue underneath) with them, towards the median line: as the sides of the windpipe are approached, a little more pressure, made in a backward direction, will place the ends of thumb and fingers in a position in which they almost meet behind the larynx, which is thus firmly held by the encircling hand in a position in which all the great bloodvessels &c. (which have been wounded) and the vertebral bodies (which, it is recorded, have *blunted a knife-point*) are far out of harm’s way, the windpipe itself starting forward and standing out prominently under the skin, which is yet fairly stretched (and can be stretched more tightly) over the site of incision, and lying both as superficially as could be desired and as perfectly under control as possible. Lastly, and this I think is not altogether unimportant, this procedure may be adopted without producing more than the very slightest degree of discomfort in any ordinary child—the younger the more easily; and one is still able to make the skin as tight as possible; now, however, the necessary pressure is distributed all round, instead of acting directly backwards upon the tube so as to flatten or displace it. I have even been able without much trouble to make the thumb and fingers feel each other behind it by this means; while by the older method I have seen the production of undoubtedly a dangerous increase of dyspnoea. I may have overrated the danger, or underrated the utility of the usual method of fixation, but it has always seemed to me to be the only difficulty in an operation, which of course has none for experienced surgeons, but to others presents often some trouble, chiefly in consequence of the fact that the means adopted for fixing the part to be incised, being ill-devised though time-honoured, are not only not to be relied on to secure that end, but, as I have tried to show, they directly tend to increase the depth of the wound of the trachea from the surface and the distress of the patient; and in all the accidents I have read of, and some that I have witnessed, this method has shown itself marked sometimes by danger, often by inutility. As to the barbarity of the *hook*, is it not an insult to the fingers of the χειρουργός?

REMOVAL OF SUPERFLUOUS HAIRS BY ELECTROLYSIS.

By JAMES STARTIN,

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UNTIL the last two years, in England the removal of superfluous hairs from the face has been an unsatisfactory operation. Superfluous hairs that grow on the face, upper lip, and chin of women, and sometimes on the noses of men, are always a source of annoyance, and very naturally they desire to have them removed.

In the summer of 1884 my attention was turned to the removal of superfluous hairs from the face by reason of several cases coming under my notice, the patients in most instances complaining of the very unsatisfactory results obtained from the use of depilatories. In the autumn of that year, in answer to an inquiry in THE LANCET,¹ I recommended the process of destruction by electrolysis, having then had several successful cases. In consultation with my friend, Dr. W. Kilner, electrician to St. Thomas’s Hospital, I devised the apparatus required; that is, I had made for me by Mr. Groves of Bolsover-street, a nice portable case containing a small twenty-cell bichromate battery, which can be regulated to three powers at will, two ordinary sponge electrodes, two yard-and-a-half wire conductors, and a needle-holder, devised much like an ordinary pen-holder. I found after considerable trial, that toughened gold, well sharpened, was the best material, and wore the best.

Now with regard to the operation. The application of the needle electrode cannot be made without more or less pain, varying much in different patients, no matter how the sponge electrode is applied. I then, after a prick or two of the needle electrode, brush over the part a 5 per cent. solution of hydrochlorate of cocaine, with good result, almost invariably deadening the pain. In one or two instances I

¹ Vol. ii. 1884, p. 715.