

cases, even when the initial symptoms are of a mild character and point to the attack being of the "simple" form, for it is never possible to predict with certainty what course the inflammatory process will take, and there is always the risk of a termination in suppuration. Supposing, however, that this does not take place and the appendix is allowed to remain, it will probably be left more or less thickened and contracted or bound down by adhesions, and therefore in such a condition that sooner or later the attacks will almost certainly recur. If all cases of appendicitis are operated upon in the early stage, as soon as the diagnosis is established, I believe that the danger will not be any greater than that which attends removal of the appendix in the quiescent period following one or more attacks. In the latter circumstances appendectomy is frequently a complicated operation owing to the presence of adhesions, the result of the previous attacks, and the appendix may be so fixed and buried in these adhesions that its recognition, as well as its removal, are often attended with considerable difficulty.

As regards the after-treatment in the cases recorded in the accompanying tables drainage was employed in every instance and even when suppuration had not taken place a small tube was left in the wound for 36 or 48 hours, perhaps rather as a safeguard than because it was absolutely necessary. When there was an encysted abscess or localised suppuration larger tubes and strips of gauze were inserted and a counter-opening was usually made in the loin, or through the vagina in females, when the pus tracked down into the pelvis. Care was always taken to disturb the parts around the area of suppuration as little as possible, so as not to break down any protective adhesions which might be forming. When the suppuration was general one or more openings were also made in the middle line or on the opposite side of the abdomen; and under the same conditions Fowler's position, and Murphy's method of saline injections into the rectum, were employed in some of the cases.

Manchester.

## Clinical Notes:

### MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

#### CAVERNOUS NÆVUS: TREATMENT BY METALLIC MAGNESIUM.

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MY attention was first directed to the above mode of treatment by a paper on the subject by my friend Dr. Gavin McCallum of Geelong, Australia, in which he reported one or two cases in which highly satisfactory results were obtained by the method to be described.

The patient, a weakly girl, 15 months old, was first seen by me at the Elder Hospital in May, 1905, suffering from a large cavernous nævus of the right side of the face which occupied the whole substance of the cheek, being covered superficially by a layer of thin, white skin resembling that which is seen covering scars which have stretched, while internally it projected slightly into the cavity of the mouth, being covered by the mucous membrane which appeared healthy and of normal texture. The tumour was larger than a walnut normally, but increased considerably in size when the patient cried, while it diminished slightly on digital pressure. Slight arterial pulsation was felt. The patient was first operated on in July, 1905, then in January, 1906, and, lastly, in July, 1906, so that a period of six months elapsed between each application. After the first operation the tumour increased in size for a few days succeeding the operation, became firmer, and conveyed a sensation of increased warmth to the touch. It then gradually decreased in size and became distinctly firmer, presenting more definite outline than it previously had done. Similar results followed the other two operations, but after the third operation I was still doubtful as to the entire success

of the treatment; the tumour had become distinctly smaller and firmer, but I was still uncertain whether some tumour tissue did not remain. The patient became ill shortly after the third operation, so that I did not see her again until November, 1907—over a year since the third operation—when I again had an opportunity of examining her. I now found that the tumour had entirely disappeared, the cheek presenting, on palpation, a thickening over the site of the tumour, due doubtless to the connective tissue which had formed as a result of the treatment. Not only had no scar resulted from the treatment but the skin over the surface, which it will be remembered was of a very unsatisfactory character when first seen, had slightly improved.

The mode of treatment, which I modified slightly, consisted in preparing several needles cut from magnesium ribbon. These were sterilised by boiling and were introduced by pushing with a pair of forceps into the substance of the tumour through a slight puncture in the surface made with a bistoury. The needles were entirely buried in the substance of the tumour, no part being left projecting on the surface, and care being taken to prevent perforation of the mucous membrane on the inner surface. Some six or eight needles were introduced on each occasion into various parts of the tumour, strict asepsis being observed throughout, and the surface operated on was covered by a film of gauze with celloidin to exclude contamination after operation. The magnesium ribbon is a little troublesome to manipulate owing to its being both soft and brittle, but with a little patience these difficulties are overcome. I do not know of any other method which would have yielded an equally satisfactory result in this case, where the tumour was large and situated on the most prominent part of the face where scarring or change of contour would at once attract attention.

The beneficial action which the magnesium needles exert in such cases is probably due to two causes. In the first place, the needles exert a mechanically irritating effect on the walls of the vessels with which they come in contact, a constant movement being kept up both by the pulsation of the little arteries and by movements of the cheek. In consequence of this movement the endothelial lining of these vessels will be abraded and a white thrombus will form, as has been demonstrated by Sir William Macewen to occur when an aneurysm is treated by his method of needling. This is the more important action. In the second place, magnesium, as is well known, is very readily oxidised, and this process of oxidation appears to take place very rapidly in the tissues; indeed, so rapid was the process in the case here reported that it was difficult to detect the presence of the needles in the tissues some three or four days after their introduction. This, of course, is an important point in this method of treatment, as it enables one to bury the needles at the outset, thus permitting rapid healing of the minute surface wound, and the needle is removed after a few days by the oxidising action of the blood and probably the leucocytes. During the oxidising process, however, the magnesium probably causes the formation of small red thrombi, in addition to the white ones mentioned above. The embryonic fixed tissue cells in the white thrombi will rapidly become converted into adult connective tissue, while the red thrombi will to some extent be replaced by similar fibroblasts which will also become converted later into adult connective tissue. The connective tissue so formed will occlude the vessels in connexion with which it grew, and, by its subsequent contraction, will obliterate the vessels in its neighbourhood. Thus the ultimate result is occlusion of all the vessels of the tumour by fibrous tissue formation, which ultimately will greatly diminish in bulk.

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#### A NOTE ON THREE CASES OF PLAGUE TREATED BY YERSIN'S SERUM.

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IN the fourth Croonian lecture by Professor W. J. R. Simpson, reported in THE LANCET of July 27th, 1907, the following remarks are made: "Great expectations were raised on the introduction of Yersin's serum but they have not been realised and a serum has yet to be discovered which while being germicidal in its action also possesses antitoxic properties." I must acknowledge that up to now