

The ligature of the vertebral from Mott's incision must only make the wound deeper still, and if the deeper parts of the wound do not heal by first intention, the ligature of the vertebral in addition will not arrest hæmorrhage from occurring. Smyth ligatured the vertebral fifty-four days after the innominate, but he did so by the usual operation for the ligature of that artery, which does not divide muscle nor leave a cavity. The *arteria thyroidea ima* is said to be present in one in ten cases. It was present in Lizar's case, and must of course be tied if it arises from the innominate or the proximal side of the ligature.

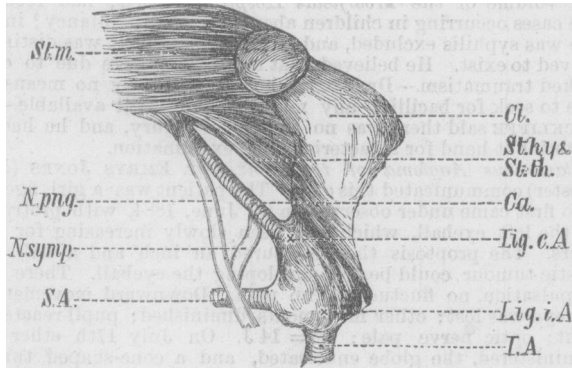


Fig. I.—The photograph has been made from the right side. The clavicle was cut through, and also the first rib; the inner third of the clavicle was then drawn across towards the left with the manubrium, the veins were cut away. The under surface of the sterno-mastoid attached to the inner third of the clavicles is exposed, also the under surface of the sterno-hyoid and sterno-thyroid muscles. The innominate artery coming up from the thorax enters the mass of scar tissue from which the subclavian and the carotid pass. The pneumogastric and sympathetic, where in contact with the subclavian artery, are quite free. The position of the ligatures buried in the scar tissue is marked. The scar tissue is attached to the under surface of the sterno-hyoid and sterno-thyroid muscles, and is drawn upon somewhat by the pulling over of the clavicle.

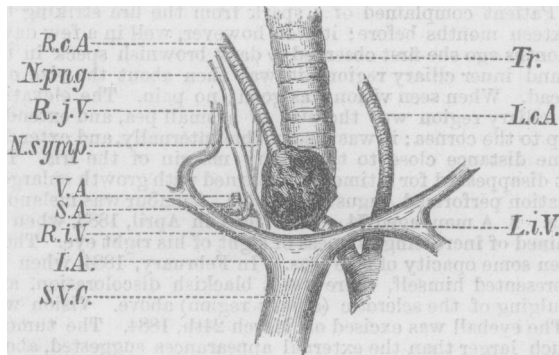


Fig. II.—The photograph is also from the right side. The upper part of the manubrium, with the sterno-hyoid and sterno-thyroid, was turned up and detached from the scar tissue closely adherent to the under surface of the muscles. The innominate artery is seen to be crossed by the left innominate vein some distance below the site of ligature, the vein being quite free. Also the internal jugular, the pneumogastric and the sympathetic nerves are free where they are in contact with the subclavian. The innominate enters the scar tissue and the carotid and subclavian leave it. The subclavian is to be seen as far as its vertebral branch.

St.m., sterno-mastoid; Cl., clavicle at its junction with the manubrium. St.h.y. & St.th., sterno-hyoid; Tr., trachea. N.png., pneumogastric; N.symp., sympathetic. I.A., innominate; Lig.i.A., point of ligature of innominate. S.A., subclavian artery; V.A., vertebral artery. R.c.A. & L.c.A., carotid, right and left; Lig.c.A., ligature of carotid artery. R.i.V., right internal jugular vein. R.i.V. and L.i.V., right and left innominate veins. S.V.C., superior vena cava.

It has been often argued before that such experiments do not apply because animals differ from men, although no definite dif-

ference is assigned. A former opponent of the application of experiments on the ligature of arteries in animals to man supported his argument by saying that the kidney or spleen could be removed in animals but not in man. The successful experiments on animals in these last two instances have directed the way to successful extirpation of a diseased kidney or spleen in man. The monkeys were certainly young adults in perfect health, but amongst the thirteen cases in the table, six range between 29 and 32 years.

Smyth's case may be said to have been cured for a time, for five years after the operation he was shown at a medical association meeting, and it was generally agreed that the cure was complete; however, the aneurysm did recur at the end of ten years. Besides this, we have the cure progressing in other cases at the time of the patient's death. When we think of the hopeless character of these subclavian aneurysms, and their most painful course, there can be little doubt that other surgeons will, in the future, be influenced to repeat the operation by the prospects of cure which former operators have almost attained.

For success the *sine quâ non* must be a ligature completely buried, to get which I believe I have shown that three things are necessary:

1. A median incision, not dividing muscles, and not requiring a drainage tube in the depths of the wound.
2. A perfectly aseptic ligature, drawn tightly.
3. The ligature of the carotid at the same time.

## REPORTS

ON

### MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

#### GLASGOW WESTERN INFIRMARY.

#### A CASE OF PŒTID EMPYEMA IN WHICH THE PUS WAS TEEMING WITH DEAD MICRO-ORGANISMS: RECOVERY AFTER REMOVAL OF A PIECE OF RIB AND FREE ABLUTIONS OF THE PLEURAL CAVITY.

(Under the care of Mr. A. ERNEST MAYLARD.)

[Reported by Dr. ROBERT ANDERSON.]

THE patient, a man aged 27, was admitted into the Western Infirmary on March 1st, 1889, suffering from breathlessness and cough, accompanied with pain. His present illness commenced about seven weeks previously with slight stitch on the right side, which was worse on taking a deep breath. This pain remained for two or three days, and then passed off, but returned about a week afterwards. The pain was in the same place, but much more intense. He remained in bed for three weeks, and at the end of that time he felt well. He then went out, and on the following day all his symptoms returned worse than before. He took to his bed again, where he has remained ever since. During his second and third attacks he was unable to lie on his right side on account of the pain and oppression in breathing. He gained most ease by being propped up in the sitting posture. His family history is good, and he himself has always enjoyed fairly good health.

*Present Condition.*—The patient is pale and thin. His breathing is rapid (40 per minute). He can lie only on the right side; if he tries to lie on his back or on his left side, he becomes very breathless. Pulse 134, soft. Tongue dry, very red, smooth, and glazed. The breath has a peculiar sweetish odour. His bowels are very loose, moving four or five times a day. Heart normal. The right lung is dull up to the clavicle. Behind, the dullness extends up to the spine of the scapula; above this the note is clear. The vocal fremitus is well marked in the upper half, and even at the base there is a faint trace. On the left side the fremitus is very marked. Respiratory murmur is very faint at the base, tubular in the upper part. Vocal resonance weak at the base, exaggerated at the upper part. Right side at nipple level measured 18 inches; left, 17½ inches. Movement of right side almost in abeyance.

On March 2nd the chest was aspirated, and 83 ounces of a very fetid purulent fluid removed. The temperature has always been over 101°, but it varies very little in the morning and evening. Urine contains no albumen.

March 8th. This morning Mr. Maylard made an incision into the right side of the chest in the lateral region, and then resected a piece of one of the ribs. About 50 ounces of excessively fetid fluid were removed. A large double drainage tube was inserted, and the cavity thoroughly washed out with carbolic solution (1 in 100). The wound had to be dressed twice during the day after the operation. Patient has had very profuse sweating since the operation.

March 9th. Dressed twice to-day. The discharge is principally serous. There is much less odour from the discharge than before.

March 10th. Pleural cavity washed out twice to-day. Patient showing signs of improvement. Temperature lower than before the operation—indeed, is practically normal.

April 18th. Since last date the patient has continued to improve. He takes his food well, and is getting fat. The cavity is closing rapidly.

May 6th. Wound nearly healed; only the slightest amount of discharge. Patient dismissed to-day, and made an out-patient.

May 14th. Patient healthy and strong; wound all but closed.

REMARKS BY MR. MAYLARD.—My reason for recording this case is not so much for the clinical aspect which it presents as for the interest attending the bacteriological investigation of the pus. The pus removed, as the report states, was excessively fetid, and, indeed, I may say I never remember smelling pus more offensive. I collected some of this pus in one or two sterilised glass tubes, and took them to my laboratory for cultivation experiments. Some cover-glass preparations were made and stained by Gram's method. The pus so examined showed abundant presence of micrococci. Agar-agar plate cultivations were made on two consecutive days, but no development ensued. Thus, while the microscope revealed the presence of crowds of micro-organisms, the cultivation experiments showed that they were all dead. It would seem as if the microbes had been the cause of their own death; that is to say, they had multiplied so rapidly as to exhaust the soil upon which they had to live, and had produced products which were poisonous to themselves. The result of the investigation struck one with some little surprise. It is, perhaps, hardly what one would expect, that a patient should survive with such a quantity of putrid material in his body, in which even microbes were unable to live.

## REPORTS OF SOCIETIES.

### OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

FRIDAY, JULY 5TH, 1889.

J. W. HULKE, F.R.S., President, in the Chair.

*Monocular (?) Suppurative Iritis.*—Dr. ROCKLIFFE (Hull) read notes of this case occurring in a girl, aged 8. For a week before admission she had suffered from "acute iritis," without lachrymation or photophobia. The family and personal history were exceptionally good. When examined the right eye had no perception of light; there was acute iritis, the iris being studded with nodules, varying in size, their apices yellowish, their bases surrounded by bright red vessels. No hypopyon; cornea clear; eyeball not tender; T + 1. In a week all pain had disappeared, and did not recur during the subsequent history of the case. Three weeks later the nodules had increased considerably in size, and two ciliary staphylomata had appeared. A month after this date the iris was becoming atrophic with T - 1; and two months later the staphylomata had entirely gone, and the iris was much disorganised; T - 2. The eyeball was excised six months after the first visit, when it was somewhat shrunken. On section there was found to be total posterior synechia, with thickening of iris and ciliary body, degeneration of lens and detachment of retina. Dr. Brailey examined the specimen microscopically, and reported: "Rounded collections of cells, clearly new growth, probably inflammatory, on the inner aspect of the iris and ciliary body, and in and behind the base of the iris; to a less degree in the remainder of the iris. The central cells of these collections exhibited signs of inflammation, but an absence of the characteristics of tubercle. One small collection was present in the choroid. He considered that the case was one of irido-cyclo-choroiditis of a peculiar nature, with many of the features met with in sympathetic inflammation." Dr. Rockliffe referred to cases reported by Hutchinson, Eales, Nettleship, Lang, and Benson, and thought the evidence was more in favour of in-

flammatory new growths than tubercle or syphilitic gummata.—Mr. HULKE understood that the speaker regarded the lesion as an inflammatory neoplasm. He inquired if bacilli had been searched for.—Dr. ROCKLIFFE replied that no search had been made for micro-organisms.—Dr. W. J. COLLINS said that a case he had put on record closely resembled the one under discussion; it occurred in one eye only; the exudation was plastic in character, nodules of pinkish-grey lymph being present. Vision was not greatly damaged and the case did not go on to suppuration. He had ventured to name it "granulation iritis." Mr. Hutchinson, in the 8th volume of the *Moorfields Hospital Reports*, had recorded five cases occurring in children above the age of infancy; in not one was syphilis excluded, and in more than one it was distinctly proved to exist. He believed that some cases were due to overlooked traumatism.—Dr. MILES thought it was by no means too late to seek for bacilli if any material were still available.—Dr. ROCKLIFFE said there was no history of injury, and he had no material at hand for a bacteriological examination.

*Cavernous Angioma of the Orbit.*—Dr. EMRYS JONES (Manchester) communicated this case. The patient was a girl, aged 18, who first came under observation in June, 1884, with protrusion of the left eyeball, which had been slowly increasing for nine years. The proptosis then measured an inch and a half. An elastic tumour could be felt enveloping the eyeball. There was no pulsation, no fluctuation, no pain. Downward movement of the eye was lost; other movements diminished; pupil reacted to light; optic nerve pale; V = 14 J. On July 17th ether was administered, the globe enucleated, and a cone-shaped tumour contained in a capsule scooped out. The optic nerve was found imbedded along the inner aspect of the growth, which measured 8 centimètres × 7 centimètres × 5 centimètres. Microscopically the growth consisted of an open sponge-like framework of fibrous tissue, with numerous round, sinuous, irregular cavities filled with blood. Sections of the growth were shown.—The PRESIDENT spoke of a specimen of cavernous angioma in the Moorfields Hospital Museum, which was removed from the orbit of a young boy by the late Mr. Critchett. In that case there was no palpable pulsation, but the proptosed eyeball could easily be pressed backwards into its normal position, showing that there was no solid mass behind it.

*Sarcoma of Ciliary Body.*—Mr. SIMEON SNELL (Sheffield) related notes of two cases:—1. The first occurred in a woman, aged 62, whose right eye was affected. She was first seen on December 2nd, 1879. Patient complained of a spark from the fire striking the eye sixteen months before; it was, however, well in a few days four months ago she first observed a dark brownish speck in the upper and inner ciliary region; it was then about the size of a pin's head. When seen vision was good; no pain. The elevation in the ciliary region was the size of a small pea, and extended close up to the cornea; it was also visible internally, and extended for some distance close to the ciliary margin of the iris. The patient disappeared for a time, but returned with growth enlarged. Enucleation performed August 30th, 1880. Tumour was melanotic sarcoma. 2. A man, aged 74.—First seen in April, 1883, when he complained of increasing dimness of sight of his right eye. There was then some opacity of the lens. In February, 1884, when he again presented himself, there was a blackish discoloration, and some bulging of the sclerotic (ciliary region) above. Vision was lost. The eyeball was excised on March 24th, 1884. The tumour was much larger than the external appearances suggested, about the size of a bean, and had the appearance of a pigmented rounded sarcoma. The patient was reported alive and well, and showed no evidence of recurrent growth, although more than five years had elapsed since the operation.

*Card Specimens.*—The following patients and card specimens were shown: Mr. L. WERNER: Microscopical Preparations illustrating Subconjunctival Cysticercus.—Dr. BUZZARD: On a Method of Employing Electricity in Ocular Paralysis.—Mr. HARTRIDGE: Ophthalmoscopic Drawing of Peculiar Appearance at the Macula.—Mr. CRITCHETT: Scissors for Division of Anterior Synechia.—Dr. S. H. HABERSHON: Case of Unilateral Central Scotoma.—Mr. LLOYD OWEN: Specimens showing Exhibitor's Method of Mounting Eyeballs.—Mr. BRAILEY: Peculiar Thickening of the Anterior Part of the Conjunctiva and of the Subconjunctival Tissue in a Child, probably tubercular.

*Annual General Meeting.*—The business of the annual meeting was then taken, the SECRETARY reading the report of the Council. On the motion of Dr. BARLOW, seconded by Mr. WARREN TAY, the report was adopted.—The Treasurer's balance-sheet was presented