

until a maximum of 3 c.cm. was being given; the total amount administered up to the 21st January, 1934, was 338.5 cubic centimetres. After the above course of treatment, the patient was found to be totally cured of leprosy as the nasal smear showed no acid-fast bacilli and all other physical signs of leprosy had disappeared. The patient was kept under observation for a period of about two and a half months after the closure of the treatment in the event of a relapse but up to the present there has been none.

After disinfection he was discharged from the leper ward and allowed to mix with the ordinary prisoners of the jail, being given separate accommodation at night.

I am indebted to my Superintendent Captain R. A. Haythornthwaite, I.M.S., for rendering me timely instructions in treating this case and for permission to publish the result.

TWO CASES OF BILATERAL CERVICAL RIBS

By N. MANGESH RAO, M.B., C.M., F.R.C.S.E.

Surgeon

and

K. MANJUNATH RAO, M.B., B.S.

Assistant Surgeon, General Hospital, Madras

Case 1.—A Hindu female, aged 30, was admitted into the General Hospital, Madras, on 21st February, 1934, for neuralgic pains in the right arm of two and a half years' duration.

History.—Two and half years ago, while bathing her child, she felt her right arm suddenly benumbed and powerless. With rest and massage she recovered. Some months later she noticed neuralgic pains in the limb after use. Latterly the pains had become worse and extended into the wrist and fingers, but relief was obtained by raising the arm to the side of the head. The pain was of a shooting type with pins-and-needles sensation and numbness. This has recently become persistent.

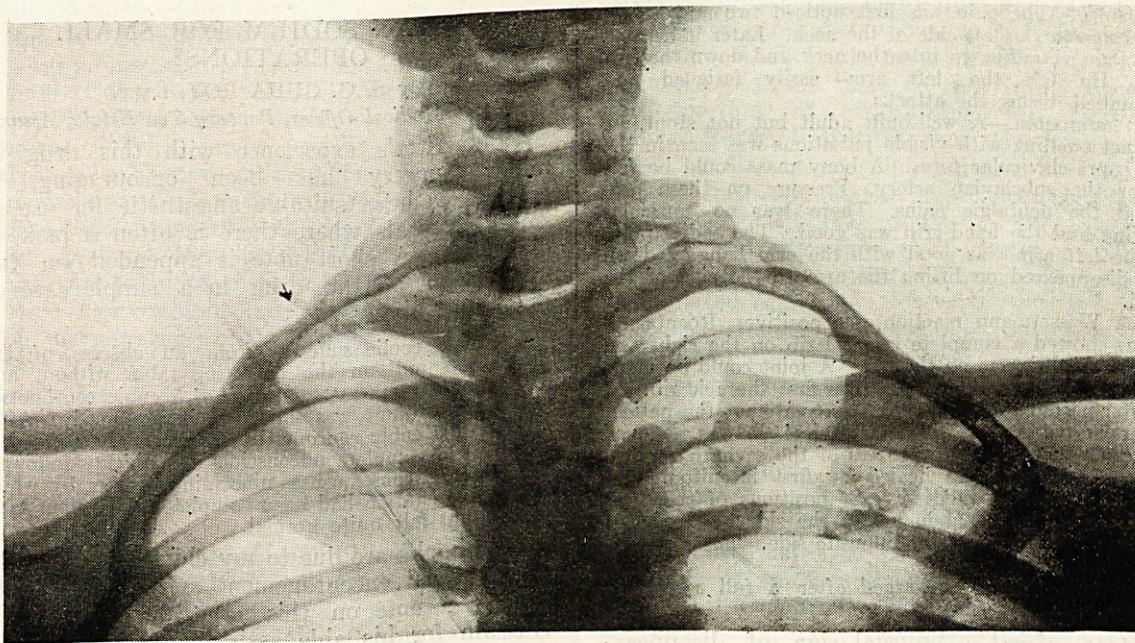
Condition on admission.—A well-nourished young woman, rather fat but sturdy. Both shoulders and arms were of equal proportion with no wasting of muscles. The grips of both hands were equal. On examination a bony resistance could be felt on both sides of the root of the neck. There was no visible pulsation on either side. On the right side neither the brachial nor radial pulse could be felt. The blood pressure in the left arm was 105/70 but none could be made out on the right side. No wasting of the intrinsic muscles of the right hand was seen.

X-ray photographs showed bilateral cervical ribs of the third degree. On the right the cervical rib seemed to join the first rib just lateral to the scalene tubercle without any joint, but on the left a joint could be made out.

Operation.—Through a collar incision the tendon of the scalenus anticus was exposed and a tenotomy of this tendon was done as advised by Adson. The pulse in the right brachial returned but was very feeble. After this the cervical rib was exposed by lifting the brachial plexus and the rib was excised subperiosteally as far as the transverse process of the seventh cervical vertebra. The periosteum was then snipped away. The brachial pulse improved but the radial one was not perceptible.

The wound healed by first intention. The radial pulse became perceptible on the third day after operation and steadily improved. All pain and tingling had ceased.

Comment.—The sudden onset was probably due to lifting the child while bathing it. The fact that only arterial pulsation was absent without any atrophy of muscles suggests that the pressure effects were mainly on the sympathetic nerve supply of the artery. The fact that the returned pulse was not as strong as on the opposite side is probably due to some intrinsic narrowing of the arteries from long-standing spasmodic contractions of the vessels. Adson advises simple tenotomy of the scalenus tendon, but in this case it did not improve the



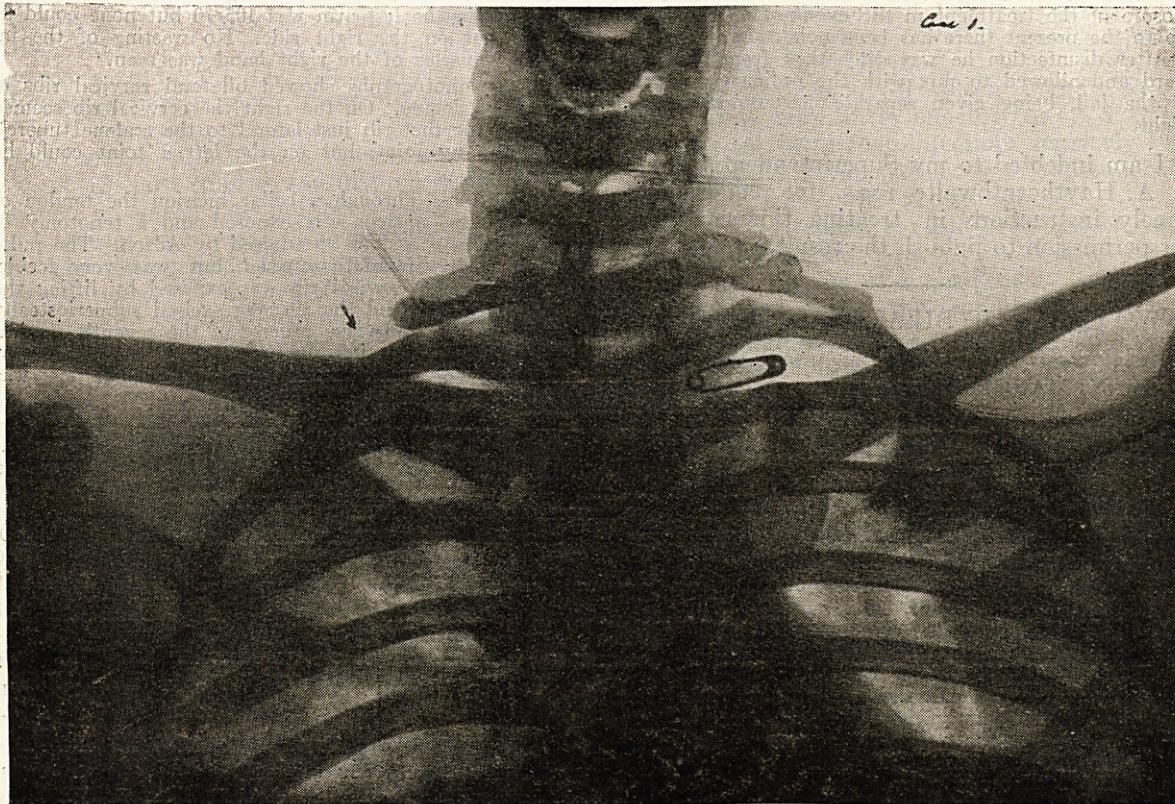
Case 1.—X-ray of bilateral cervical rib before operation.

pulse to any great extent until the rib was also removed.

Case 2.—A Hindu male, aged 43, was admitted on 4th April, 1934, for neuralgic pains shooting down the left arm and up into the neck, of two and a half years' duration.

arm to the side of the head was due to the subclavian artery being compressed between the raised clavicle and the cervical rib.

We are obliged to the Government X-ray Institute, Madras, for the roentgenograms.



Case 1.—X-ray of bilateral cervical rib after operation.

History.—The pain was first noticed two and a half years ago in the left side of the neck. Later it became neuralgic, shooting up into the neck and down the left arm. He felt the left arm easily fatigued and benumbed during the attacks.

On admission.—A well-built adult but not stout. A distinct swelling with visible pulsations was seen in the left supra-clavicular fossa. A bony mass could be felt under the subclavian artery. Pressure on these produced the neuralgic pains. There was no muscular wasting and the hand-grip was good. The radial pulse in the left arm was good with the arm hanging down but disappeared on lifting the arm to the side of the head.

The Wassermann reaction was positive. Roentgenograms showed a complete cervical rib on the right and one of third degree on the left. A joint could be made out between the cervical and the first thoracic rib.

After a course of anti-syphilitic treatment the patient was operated on and the left cervical rib was removed as far as the transverse process of the seventh cervical vertebra. The wound healed by first intention. The radial pulse was tested in both positions of the arms (hanging down and abducted to the side of the head) and was as good as on the opposite side. The neuralgic pains had ceased.

The patient was discharged after a full course of anti-syphilitic treatment.

Comment.—The unusual sign of disappearance of the radial pulse on abduction of the

EVIPAN SODIUM FOR SMALL OPERATIONS*

By S. C. GUHA ROY, L.M.F.

Assistant Medical Officer, Paneery Tea Estate, Assam

THE writer's experience with this drug in minor surgery has been encouraging. It appears to be a suitable anæsthetic for use in small hospitals where there is often a lack of assistants. A short note is appended on the application of the drug in a simple case of mammary abscess.

A female coolie suffering from an abscess of the breast was put on the operating table without any preliminary treatment. A total of 5 cubic centimetres of evipan sodium was injected intravenously. After the first 2.5 cubic centimetres had been given the jaw relaxed and complete unconsciousness quickly followed. She regained consciousness nine minutes later by which time the operation had been completed. An hour later the patient felt quite normal.

My thanks are due to my chief Dr. E. Burke for his kind encouragement and permission to publish a note on this case and to Mr. T. Hassain for his able assistance.

* Rearranged by Editor.