CERVICAL COLLAR-STUD COLD ABSCESES
AN UNUSUAL SITE

BY
Lieut.-Colonel JOHN MACKAY-DICK, M.B.(Edin.), F.R.C.P.E.
Royal Army Medical Corps

Captain H. T. DAVIES, M.B., B.S.(Lond.)
Royal Army Medical Corps

AND
Royal Army Medical Corps

From the Connaught Hospital, Bramshott (Army Chest Centre)

We can find no record of a cervical cold abscess presenting as an otherwise symptomless swelling in the suprasternal fossa. Such a swelling in this location would suggest a thyroglossal origin, a dermoid cyst, a lipoma or a sebaceous cyst. Hamilton Bailey (1945) in an account of 200 cervical collar-stud abscesses gives the following incidence of the site of the causative tuberculous gland:

- Submaxillary triangle ... ... 15 or 7.5 per cent. of cases.
- Upper jugular chain ... ... 143 or 71.5 per cent. of cases.
- Middle jugular chain ... ... 10 or 5 per cent. of cases.
- Supraclavicular triangle ... ... 12 or 6 per cent. of cases.
- Posterior triangle ... ... 20 or 10 per cent. of cases.

None of the cervical collar-stud abscesses occurred in the suprasternal fossa.

Again according to Hamilton Bailey, in approximately 25 per cent. of cases the superficial abscess does not overlie the breaking-down glands that feed it. The factory and storehouse may be as much as 6 to 8 inches apart. In the surgical treatment of these conditions he considers it fundamental to remove not only the storehouse but also the factory and the tunnel which connects one with the other. That was written in 1945 and probably the only addition to it now would be an anti-bacterial drug therapy and sanatorium régime.

Details of the two cases of cold abscess in the suprasternal fossa are as follows:

Case 1.

A 20-year-old member of the W.R.A.C. reported sick on board ship to Singapore in May, 1954, with a small painless swelling in the suprasternal fossa. Previously her health had been excellent and she had not come in contact with any infectious diseases. She was given no treatment at that time.

On 9th June she was admitted to B.M.H., Singapore, as the swelling had increased in size and was now the size of a large cherry. In all other respects she felt well. The swelling was tethered to the overlying skin, which was reddened. On the 15th it was incised and pus and fragments of the wall were evacuated. The pathological report on this material stated "giant cells of the Langhans type and occasional small tubercles; a few areas of necrosis but no
true caseation." Chest radiograph showed bilateral apical opacities consistent with the appearance of tuberculosis. The erythrocyte sedimentation rate was 33 mm. (Westergren) in the first hour. On 1st July chemotherapy was started, consisting of streptomycin, 1g., and para-amino-salicylic acid (PAS), 20g. daily. This was continued until 14th August, 1954, when streptomycin was given every third day and PAS continued daily.

She returned to U.K. by hospital ship and was admitted to the Connaught Hospital on 11th September, 1954. At that time she had a 4 cm. scar in the suprasternal fossa, 1 cm. above the upper edge of the sternum, the centre of which was oozing serous liquid and required daily dressings. Swabs of this discharge grew only coagulase-negative Staphylococcus aureus and no tubercle bacilli.

Apart from the neck sinus no clinical abnormalities were detected: hæmoglobin, 80 per cent.; W.B.C., 10,000 per cu. mm. (P, 60; L, 37; M, 1; E, 2); E.S.R., 27 mm. Gastric lavage and laryngeal swabs were negative on culture for tubercle bacilli. Chest radiograph and tomograms showed bilateral apical streaky opacities with no cavitation.

On arrival, chemotherapy was changed to streptomycin, 1g. and I.N.A.H., 200 mg., on every second day.

She made satisfactory clinical and radiological improvement but the neck sinus did not heal, and on 6th December, 1954, excision was performed by Mr. G. Kent Harrison. At operation the sinus track was found to pass behind the sternum in the mid line for 2 cm. inferior to the superior edge of the sternum. No bony involvement was found. Examination of the excised sinus track showed extensive fibrosis with round cell infiltration and tubercle formation. No tubercle bacilli were grown on culture.

Since then the wound has remained well healed and shows no signs of breaking down. Radiologically the bilateral apical opacities are resolving. There was no evidence of mediastinal lymphoglandular enlargement.

**Case 2**

This 18-year-old butcher's assistant joined the army in May, 1954. He had no previous history of illness apart from the usual childhood ailments and there was no relevant family history.

Early in July, 1954, he noticed a small, soft painless swelling in the suprasternal fossa. It gradually increased in size during the next three weeks until, when it was about the size of a pigeon's egg, he reported sick. He was seen at a hospital where a diagnosis of dermoid cyst was made. His name was put down for admission for operation as soon as parental consent was obtained.

Towards the end of August he noticed that the lump was increasing more rapidly in size and that the skin over it was becoming red and thickened. On 20th August, 1954, the reddened skin broke down and discharged a little thin yellow fluid.

He was admitted to a hospital and on 5th September an operation for the excision of what was still thought to be a dermoid cyst was performed. At operation is was found that the swelling was in fact the head of a large collar-stud
abscess, the base of which lay in the superior mediastinum behind the sternum. No actual pus was found, but a large quantity of necrotic material was removed.

The pathological report on part of the tissue removed at operation stated that the subcutaneous tissue had been replaced by tuberculous granulation tissue consisting of lymphocytes, plasma cells, epithelioid cells and giant cells. There was also a little caseation present. No tubercle bacilli were found on either direct smear or culture.

A chest radiograph showed the presence of two large, partially calcified right paratracheal lymph glands. The lung parenchyma was radiologically normal.

A diagnosis of tuberculous collar-stud abscess secondary to a mediastinal tuberculous adenitis was made.

The neck scar healed completely within 14 days.

The patient was treated with three months' bed rest, followed by three months' up-grading. He received 1 g. of streptomycin daily for 30 days, followed by 1 g. on alternate days to the end of his six months' treatment. On each day that he received streptomycin he also received I.N.A.H., 100 mg. b.d.

COMMENT

It would appear beyond doubt that the factory in each case was a mediastinal lymph gland.

In Case 1 there are presumably partially calcified paratracheal lymph glands. It would appear realistic to suggest excising these glands, as no doubt they are a reservoir of multitudes of tubercle bacilli and a potential danger, but as that would involve a formidable operation, and as the patient would appear to have done well, we have let the matter rest.

In Case 2 there is bilateral apical pulmonary disease, no doubt the result of haematogenous dissemination. There is no radiological evidence of an old primary focus in the lung, but doubtless the mediastinal component of the primary complex remains and was the source of the cold abscess.

In neither case was the factory excised. Theoretically it might be wise, but practically in both cases the present line of treatment is probably better.

SUMMARY

Two cases of cervical collar-stud cold abscess presenting as otherwise symptomless swellings in the suprasternal fossa are described.

The source of each is undoubtedly tuberculous mediastinal lymph glands.

The site and source of these two cervical cold abscesses are rare. We can find no previously recorded case.

We wish to thank Mr. G. Kent Harrison, F.R.C.S., civilian specialist in thoracic surgery, Connaught Hospital, Bramshott (Army Chest Centre), for his help.

REFERENCE

Cervical Collar-Stud Cold Abscesses: An Unusual Site

John Mackay-Dick, H. T. Davies and W. A. Mahon

*J R Army Med Corps* 1956 102: 146-148
doi: 10.1136/jramc-102-02-05

Updated information and services can be found at:
http://jramc.bmj.com/content/102/2/146.citation

*These include:*

**Email alerting service**
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/