

Aneurysm of internal mammary artery

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den Otter, G, and Stam, J (1978). Thorax, 33, 526-527. Aneurysm of internal mammary artery. A fusiform non-sclerotic aneurysm of the left internal mammary artery was found in an otherwise healthy young woman. Aneurysms such as this seem to be extremely rare since no published case could be found.

Case report

In October 1973 a 30-year-old woman was referred to us for a coin lesion in the left upper lobe found during a routine examination (figs 1, 2). It had evidently developed during the past three years since it did not show on a chest radiograph of excellent quality made in 1970. In 1972 she had an augmenting mammoplasty in another hospital (the silicon prostheses are clearly visible in fig 1), but no radiographs of the lungs were taken at that time.

Physical examination failed to show an abnormality. The same held true for specific gynaecological and vascular screening. Blood and urine

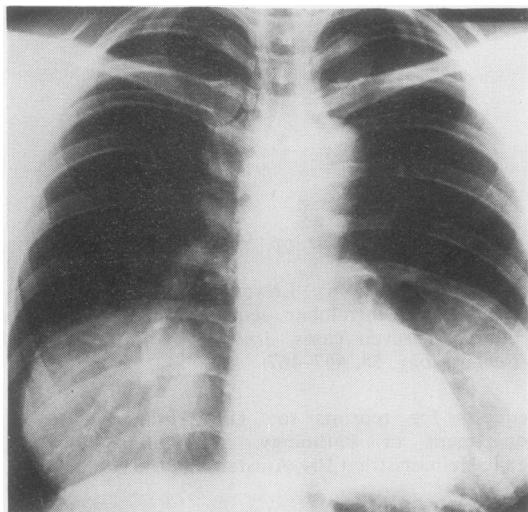


Fig 1 Posteroanterior chest radiograph. Coin lesion in left upper area. Silicon breast prosthesis.

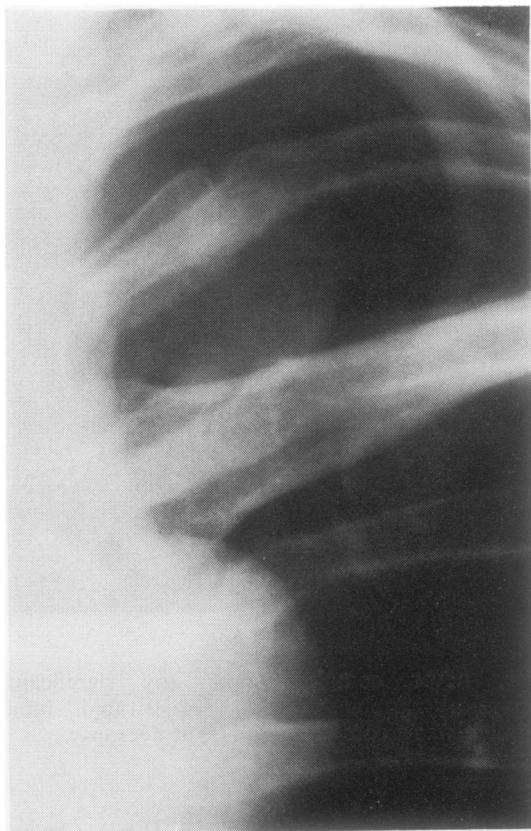


Fig 2 Detail of fig 1.

chemistry were normal. An artificial pneumothorax was performed, but because of local adhesions it failed to collapse the upper lobe, and the radiological appearance of the area remained

unchanged. An exploratory operation was advised.

A left lateral thoracotomy confirmed the existence of the adhesions. The "coin lesion" turned out to be an aneurysm of the internal mammary artery. This was excised together with the feeding vessel.

The patient had an uneventful recovery. A recent photograph of the thorax shows normal appearance on both sides.

The pathologist confirmed the operative diagnosis. He described the lesion as a fusiform aneurysm, filled with an organising thrombus. The intima showed degeneration and hyalinisation. There was fragmentation of the *membrana elastica interna* and scattered areas of atrophy in the media. The excised part of the artery itself also showed central thrombosis with organisation and intimal thickening. The specimen did not show any sign of specific arteritis or gross arteriosclerotic changes.

Discussion

Publications on the surgical pathology of the internal mammary artery are scarce. We were unable to find any case of an aneurysm similar to the one just described.

Martin *et al* (1973) report on a false traumatic aneurysm of the artery caused by peristernal wiring and a paper by Rainer *et al* (1973) mentions

four cases of severe sclerosis of the artery, in one of which there was an aneurysmal dilatation of the adjacent subclavian artery, which affected the outflow of the internal mammary artery. These patients, however, suffered from severe arterial disease in other areas, which was not so in our patient.

Although we cannot provide a satisfactory explanation of our case, this communication may serve its end if it alerts pulmonologists to yet another type of coin lesion and if it makes cardiac surgeons who might intend to use it in coronary bypass surgery aware of the existence of thrombotic and aneurysmal non-sclerotic disease of the internal mammary artery.

References

- Martin, A, Ross, B A, and Bainbridge, M V (1973). Peristernal wiring in closure of median sternotomy. (False aneurysm of the internal mammary artery.) *Journal of Thoracic and Cardiovascular Surgery*, **66**, 145-146.
Rainer, W G, Sadler, T R, and Liggett, M S (1973). Internal mammary arteriography prior to coronary bypass surgery. *Chest*, **64**, 523-524.

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