

WHEN A THYROID COLD NODULE IS NOT A THYROID COLD NODULE: A CASE REPORT

Pages with reference to book, From 173 To 174

Durr-e-Sabih, Sher M. Khan (Atomic Energy Medical Centre, Nishtar Hospital, Multan.)

A nodule in the front of neck is usually thyroidal in origin, followed by a lymph node mass. A 'cold' thyroid nodule, i.e., one which does not concentrate radio-iodine or technetium on scintiscanning is usually subjected to a fine needle aspiration, to drain cysts or to obtain cytological samples. We present a case where such an approach would have been potentially catastrophic.

REPORT

A 32 year old housewife presented with six month's history of fever, loss of vision in the right eye, slight weakness of the left arm and a three month's history of a nodular swelling in the front of neck. The nodule was located to the right of midline, above the sternoclavicular joint, and was firm and fixed. The possibility of a thyroid nodule or a lymph node mass was suggested by the referring physician and she was sent to this Centre for a thyroid scan. A Tc00m scan showed a cold area in the right lobe of the thyroid (Figure 1).



Figure 1. Thyroid scan showing a 'cold' area in the lower part of the right lobe.

Ultrasonography was done as is the routine with all our patients who have solitary 'cold' nodules on scintiscanning, Realtime pictures showed a cystic lesion with prominent pulsations in the centre and communication with the common carotid artery (Figure 2).

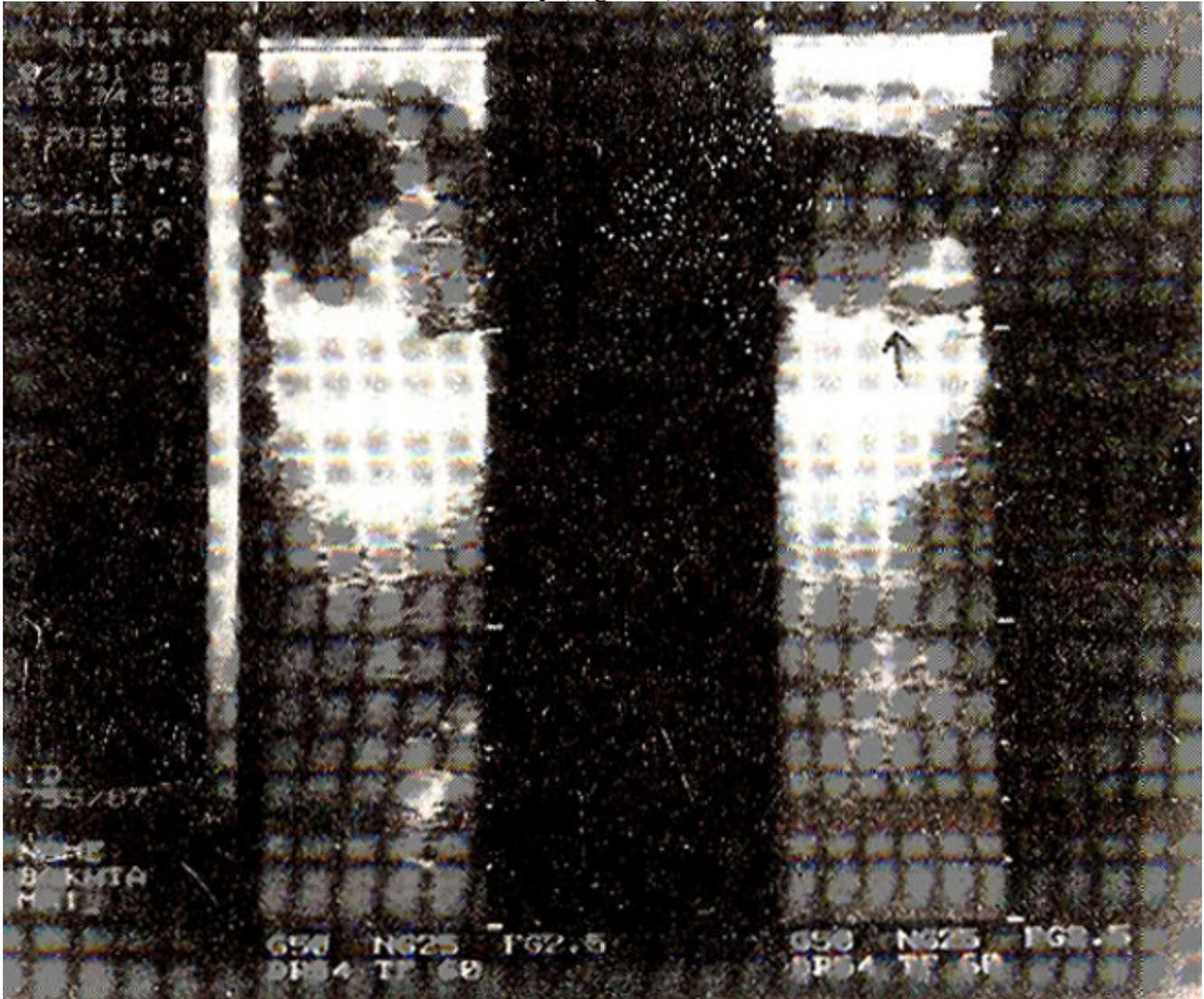


Figure 2. Ultrasonography image showing cystic lesion communicating with the common carotid artery, (arrow).

The picture was unmistakable for an aneurysm of the common carotid artery. On re-examining the patient the mass was found to be expansile and there was an audible bruit on the right side of the neck.

DISCUSSION

A 'cold' thyroid nodule is usually subjected to a biopsy procedure, open or more often fine needle aspiration. While some advocate sonography prior to biopsy¹, others have not found it to be very helpful². In this case, the carotid artery aneurysm was distorting the thyroid contour and appeared to be a 'cold' thyroid nodule on scintiscanning. An attempt at fine needle aspiration could have been

disastrous because of the brittle walls. Although an extremely rare occurrence, it does underscore the complementary nature of ultrasonography to nuclear medicine procedures. The clinical signs were quite convincing, but at times even the most obvious clinical signs can be missed in a busy outpatient department or a private clinic. It is the duty of the diagnostician to devise routines in his laboratory to extract the maximum possible information from any given clinical situation. At the same time such procedures should be cost effective, rapid and acceptable to the patient. Ultrasonography is an elegant example of such a complementary modality in a background of nuclear medicine.

REFERENCES

1. Walker, J., Findlay, D., Amar, S.S., Small, P.G., Wastie, M.L. and Pegg, C.A.S. A prospective study of thyroid Ultrasound scan in the clinically solitary thyroid nodule. *Br. J. Radiol.*, 1985; 58 617.
2. Wernier, S.C. and Ingbar, S.H. *The thyroid; a fundamental and clinical text*. New York, Harper and Row, 1978, p.515.