

ANOTHER MEANS OF DIAGNOSING SYNOVIAL CYST DISSECTION

In reference to the article by Pozderac and Good (Arthroscintigraphy in acute synovial rupture of the knee, *J Nucl Med* 15: 7-9, 1974) we would like to call attention to another technique by which the nuclear medicine physician or radiologist may make this difficult differential diagnosis.

Diagnostic ultrasonic B scanning of the calf has been used successfully to distinguish dissection of synovial fluid into the calf from thrombophlebitis, and would appear, on the basis of simplicity and rapidity, to be the method of choice, when available.

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REFERENCE

1. McDONALD DG, LEOPOLD GR: Ultrasound B-scanning in the differentiation of Baker's cyst and thrombophlebitis. *Br J Radiol* 45: 729-732, 1972

THE AUTHORS' REPLY

We are interested in Dr. Arkless's experience with "posterior leakage" after exercise in knees of normal subjects. One may observe the entry of contrast material posteriorly into the popliteal bursa but extension well into the calf is not normally observed in our experience unless associated with synovial rupture or cyst.

We agree with Dr. Arkless that venography is a useful tool for evaluating patients suspected of having deep-vein thrombophlebitis of the calf. However, acute synovial rupture of the knee (abrupt decrease in the size of a knee involved with synovitis plus signs simulating thrombophlebitis) is an established syndrome in rheumatology that does not require venography for confirmation but may require a procedure to demonstrate the rupture (1,2).

We also agree that positive contrast arthrography does have advantages over gas arthrography. Either of these methods for performing arthrography can be used to confirm a diagnosis of synovial rupture.

We reported the efficacy and advantages of a newer method (arthroscintigraphy) in establishing this diagnosis.

The authors do not have any experience with ultrasound B scanning; however, we do appreciate that Dr. Winston and Dr. Pritchard have called attention to yet another possible use for this noninvasive diagnostic tool.

We thank Drs. Arkless, Winston, and Pritchard for their comments and interest in the article.

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REFERENCES

1. GOOD AE: Rheumatoid arthritis, Baker's cyst, and "thrombophlebitis." *Arthritis Rheum* 7: 56-64, 1964
2. BOYLE JA, BUCHANAN WW: *Clinical Rheumatology*, Philadelphia, FA Davis, 1971, p 124

ANGIOSCINTIGRAPHY VERSUS PORTABLE-PROBE TECHNIQUE

AS A ROUTINE DIAGNOSTIC AID FOR CEREBRAL DEATH

We are very interested in a recent case report (1) which demonstrated the cerebral passage of an intravenously injected bolus of $^{99m}\text{TcO}_4$ by means of sequential gamma camera imaging in a patient in deep drug-induced coma, who subsequently recovered. We have addressed ourselves to this problem (2,3) over the last few years using portable-probe equipment and have completed 142 bolus transit studies in 80 deeply comatose patients who met all the recognized clinical criteria for cerebral death.

The causes of coma in these patients included transient cardiac arrest, head injury, intracerebral bleeding, and drug intoxication. Since Nordlander, et al have questioned the use of probe equipment for the study of cerebral death we offer the following comments.

For possible routine clinical application in the diagnosis of brain death any ancillary technique must meet certain prerequisites: (A) accuracy, a mistaken diagnosis of brain death is not tolerable; (B) re-