The Use Of Percutaneous Spinal Biopsy In Suspected Discitis

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Objective

To investigate the management impact of percutaneous spinal biopsy in patients with suspected discitis.

Material and Methods

The case notes and radiological imaging of 32 patients who underwent percutaneous spinal biopsy was performed over the last 6 years. Twenty patients with a clinico-radiological diagnosis of discitis were identified. Post operative spinal infections and tumours were excluded. Management before biopsy was noted including the antimicrobial therapy. The results of the histology and microbiology along with subsequent diagnosis and management were analysed.

Results

There were twelve acute and eight chronic infections. Thirteen patients had blood cultures on admission of which six (45%) grew an organism. Seven patients (35%) had received antibiotics before biopsy. An organism was isolated on biopsy in nine patients (45%). Patients with positive blood cultures grew an organism on biopsy in four cases (66%). Of the seven patients on antibiotics, five grew an organism (70%), including one case of staphylococcus aureus in a patient receiving flucloxacillin and the others being tuberculosis. Of the thirteen patients not on antibiotics, four biopsies isolated an organism (30%), which included one case of tuberculosis. Tuberculosis was radiologically suspected in four of the five cases. One patient underwent surgery for deterioration of neurology. The result of the biopsy led to a change in management in all 9 of the 20 patients (45%). The infections were all treated successfully with prolonged antimicrobial chemotherapy.

Conclusions

Our series revealed a 45% positive culture rate from percutaneous spinal biopsy. Positive biopsies lead to a change in management especially in cases of tuberculosis.

References

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