



## Spondylodiscitis after transvaginal oocyte retrieval for in vitro fertilisation

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The frequency of iatrogenic spondylodiscitis is clearly increasing, which may reflect the increasing number of aggressive interventional procedures which may cause it. One of these is oocyte retrieval for in vitro fertilisation. The authors describe a case of *Streptococcus faecalis* L5-S1 spondylodiscitis. Conservative treatment is the rule, but surgery may be indicated in specific cases such as the one presented.

### INTRODUCTION

Nearly 30% of all cases of spondylodiscitis are currently iatrogenic ; this is probably linked to the growing number of interventional procedures that may lead to it (2). Pelvic surgery is one of these (1). Incubation takes one to two weeks (range : 4 days to 10 weeks) ; diagnosis is often missed at first (3). Haemocultures are negative in two thirds of the cases. Very often identification of the responsible pathogen and determination of its sensitivity are only possible after needle biopsy or debridement (5). Classically, treatment is conservative, but it must be carried out as an emergency, in a hospital environment (4). Surgery becomes mandatory in case with neurological deficit, abscess formation, or definite instability ; debridement must be thorough (5).

### CASE REPORT

A 42-year-old woman underwent a transvaginal oocyte retrieval for *in vitro* fertilisation. The punc-

ture was cumbersome and took several hours. The next day she complained of increasing pelvic and sacroiliac pain, but this was ascribed to the uncomfortable position during the procedure. A symptomatic treatment was started. Two days later the pain became unbearable. Clinical examination revealed tenderness in the lumbosacral area, without neurological implications. The biochemistry was normal, except for the CRP : 14.2 mg/dl. Very soon it went up to 30 mg/dl, while the clinical picture became complete, with chills and fever. MRI showed mild prevertebral infiltration at the L5-S1 level, compatible with incipient spondylodiscitis. Haemocultures were obtained and a large spectrum antibiotic was started on a preliminary basis : cefepim 2 g I.V., three times a day. This was replaced with ampicillin I.V., 2 g six times a day, and gentamycin I.V., 80 mg three times a day, when a *Streptococcus faecalis* was cultured, sensitive to

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**Fig. 1.** — MRI : L5-S1 spondylodiscitis with paradiscal abscess, presacral infiltration and extension into the vertebral bodies L5 and S1 (T1-T2 and gadolinium).

these antibiotics. Bed rest was continued. The clinical course fluctuated, the fever returned after an initial decline, and the biological parameters became worse. A second MRI (fig 1) confirmed the unfavourable evolution with peridiscal abscess, infiltration of the anterior aspect of the sacrum, and extension into the vertebral bodies L5 and S1. Surgical debridement was then decided upon, but was postponed for three days in order not to disturb the antibiogram. An anterior approach was chosen. The lumbosacral joint was carefully débrided and filled up with a tricortical iliac crest graft. Bed rest was continued, all the more as the graft was not sufficiently stable. Again *Streptococcus faecalis* was demonstrated, despite the adequate treatment previously administered, but it was sensitive to ampicillin. Its Minimum Inhibitory Concentration (MIC) was determined and it was administered intravenously for 6 weeks. One week postoperatively the patient was allowed out of bed with a

lumbar brace. Postoperative MRI showed reduction of the inflammatory signs and regression of the prevertebral infiltration. The biochemistry normalised after 6 weeks, but pain and rigidity subsided rather slowly. The patient returned home six weeks after her operation ; from then on she took amoxicillin orally, 1 g three times a day, for 8 months. One year after surgery 70% pain relief was noted. Roentgenograms showed complete L5-S1 fusion, and the plan of a posterior fusion was discarded.

## CONCLUSION

Modern techniques in medicine are not free of complications. This case demonstrates how a seemingly innocent transvaginal puncture of an ovary can lead to a resistant spondylodiscitis. Conservative treatment should be the first choice, but non-response can necessitate extensive debridement.

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