Letters to the Editor

Failure of unicondylar knee replacement in a patient with psoriatic arthropathy

Sirs,

Unicondylar knee arthroplasty is a well-documented alternative for osteotomy in the treatment of locally restricted osteoarthritis in young patients (1, 2). In the case of inflammatory arthritides, the situation is disappointingly different (3). Here we would like to report a case that emphasizes the importance of proper evaluation of the patient's joint symptoms when a unicondylar arthroplasty is considered in a psoriasis patient.

A 55-year old male building contractor had had psoriasis for 20 years but he had never experienced any joint symptoms that would have been considered psoriatic arthritis. He had successfully undergone demiarthroplasty 3 years previously in his left knee with osteoarthritis being the indication. However, during a period of a few months when the patient had worked on all fours, the knee had developed worsening pain and swelling that ultimately led to the rupture of a Baker's cyst. A month later the pain still continued and he sought medical advice.

Knee aspiration disclosed cloudy synovial fluid, which was considered purulent. As CRP was high (Fig. 1) and the patient had fever, infection of the knee prosthesis was suspected and intravenous antibiotics were commenced. Because septic fever continued, demiprosthesis was removed and the joint was debrided a week later. None of the bacterial cultures taken were positive.

After the operation, CRP and ESR remained still relatively high and the knee remained symptomatic despite the extended use of intravenous antibiotics (Fig. 1). Therefore the patient was referred to a rheumatologist, who detected synovitis in the wrists, elbows and the contralateral knee as well. Psoriatic arthritis was diagnosed and antibiotics were changed to antirheumatics (prednisolone 15 mg o.d., sulphasalazopyridine 1 gm b.i.d.), which led to remission of the joint symptoms.

After 3 months of treatment the patient received a total knee implant to his left knee. The Knee Society Knee Scores (4) after 6 and 12 months of follow-up were 100 and 70, respectively. To control the disease that continued in other joints, methotrexate (15 mg once a week) with folic acid was initiated and at the moment infliximab is under consideration.

Inflammatory arthritides are considered relative contraindications for unicondylar arthroplasty (1-3). Estimates regarding the prevalence of arthritis among patients with skin psoriasis have varied between 6% and 42% (5, 6). Still, it may be difficult to diagnose inflammatory monoarthrits in a patient, who is old enough to have osteoarthritis (5, 7). It is also possible that both diseases occur in the same joint. This is one possible explanation for the failure of knee replacement in the present case. Another alternative is more tragic: deep Köbner phenomenon refers to development of psoriatic arthritis in a joint which is subjected to trauma (7). It is possible that the synovial membrane of the joint that was operated on responded with psoriatic synovitis to the trauma inflicted by arthroplasty. The subsequent removal of the demiprosthesis might have renewed the Köbner phenomenon and induced the onset of arthritis in other joints. Considering the later progression of the disease (Fig. 1), it can be regretted that the patient did not receive total knee prosthesis in the primary arthroplasty, in particular as it has been reported that total removal of the hyaline cartilage from an already inflamed joint leads to the amelioration of arthritis (8, 9).

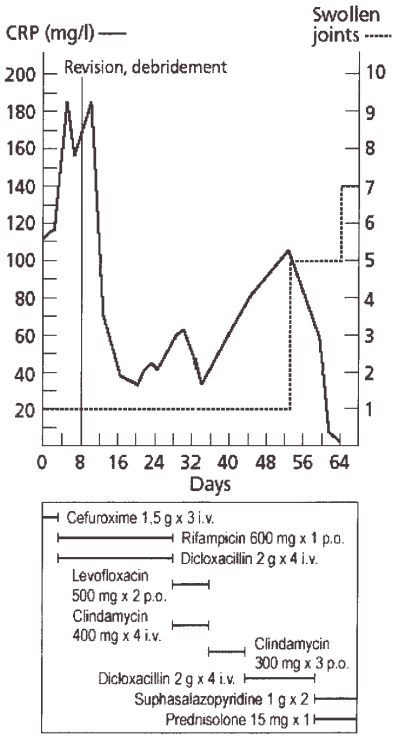

Fig. 1. The effect of various antibiotics and antirheumatic drugs on C-reactive protein level (CRP) during the first 68 days of active treatment. A count of swollen joints is also shown.

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References

1. DESHMUKH RV, SCOTT RD: Unicompartmental knee arthroplasty: long-term results. *Clin Orthop* 2001; 392: 272-8.
2. IORIO R, HEALY WL: Unicompartmental arthritis of the knee. Current Concepts Review. *J Bone Joint Surg Am* 2003; 85: 1351-64.
3. ROBERTSSON O, KNUTSON K, LEWOLD S, GOODMAN S, LIDGREN L: Knee arthroplasty in rheumatoid arthritis. A report from the Swedish Knee Arthroplasty Register on 4,381 primary operations 1985-1995. *Acta Orthop Scand* 1997; 68: 545-53.
4. INSALL JN, DORR LD, SCOTT RD, SCOTT WN: Rationale of the Knee Society clinical rating system. *Clin Orthop* 1989; 248: 13-4.
5. GLADMANN DD, ANTONI C, MEASE P, CLEGG DO, NASH P: Psoriatic arthritis: epidemiology, clinical features, course and outcome. *Ann Rheum Dis* 2005; 64: ii 14-7.
6. ZACHARIAE H, ZACHARIAE R, BLOMQVIST K *et al.*: Quality of life and prevalence of arthritis reported by 5,795 members of the Nordic Psoriatic Associations. *Acta Derm Veneorol* 2002; 82: 108-13.
6. ORY PA, GLADMAN DD, MEASE PJ: Psoriatic arthritis and imaging. *Ann Rheum Dis* 2005; 64: ii 557.
7. SAINI R, TUTRONE WD, STROBER BE: The Kobner phenomenon and psoriatic arthritis. *Cutis* 2003; 72: 405-6.
8. KONTTINEN YT, LI T-F, LASSUS J, WARIS V, SANTAVIRTA S, VIRTANEN I: Removal of hyaline articular cartilage reduces lymphocyte infiltration and activation in rheumatoid synovial membrane. *J Rheumatol* 2001; 28: 2184-9.
9. LI TF, SANTAVIRTA S, WARIS V *et al.*: No lymphokines in T-cells around loosened hip prostheses. *Acta Orthop Scand* 2001; 72: 241-7.

Cyclosporine in addition to infliximab and methotrexate in refractory rheumatoid arthritis

Sirs,

In this letter we report the results of a trial aimed at evaluating whether the addition of cyclosporine A (CsA), an agent often used in the combination therapies for rheumatoid arthritis (RA) (1), is a feasible option in cases of RA refractory to the association infliximab and methotrexate (MTX).

The primary objective of the study was to evaluate the safety of combined infliximab, CsA and MTX therapy in adult RA patients, but the efficacy of the treatment was also assessed. This pilot, 6-month open-label study was carried out in four Italian Rheumatology centres after the approval of the local Ethics Committees. The inclusion criteria were: a diagnosis of RA (ACR criteria) (2), an age of 18-75 years, no contraindications to the use of CsA, patient's willingness to participate to the study (written informed consent), and an (original) Disease Activity Score (DAS) (3) of ≥ 3.0 despite combined therapy with infliximab (3-5 mg/kg every 6-8 weeks) and MTX (10-15 mg/week) for at least 6 months. The infliximab and MTX doses and times of administration were left unchanged; the initial CsA dose was 3.0 mg/kg/day in 2 oral administrations. Safety and tolerability were evaluated by carefully questioning and examining the patients for adverse events, and by performing all stan-