

LONG-TERM EVALUATION OF RADIOISOTOPE SYNOVECTOMY WITH YTTRIUM 90 AND RHENIUM 186 FOR CHRONIC SYNOVITIS IN TURKISH HEMOPHILIACS: AKDENIZ UNIVERSITY EXPERIENCE



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INTRODUCTION and PURPOSE

Chronic synovitis often occurs in people with haemophilia. Untreated chronic haemophilic synovitis affects the metabolism of chondrocytes, thus leading to haemophilic arthropathy. A recently introduced therapeutic protocol includes radiation synovectomy (RS), a safe and cost-effective therapeutic method. The aim of this study was to evaluate the effect of RS with Yttrium 90 and rhenium186 in the joints of patients with chronic haemophilic synovitis.

METHOD

Nineteen patients who have gone under RNS from March 2006 up to now were enrolled in the study. Most of the patients (n = 18) were hemophilia-A. We have performed 34 radioisotope synovectomy (RS) in 19 children and young adults with hemophilia, age ranging 72-197 months (mean 158,3) in Akdeniz University Hemophilia Center, Antalya, Turkey for last 7 years. We always preferred to use Yttrium 90 for for knee joints and rhenium186 (186Re) for elbow or ankle joints were used to perform RS in

hemophiliac patients. We have performed with Re(186) for knees (n = 15), elbows (n = 8), ankles (n = 10) and other (n = 1) in total of 34 RS procedures for 19 patients. Four joints of 2 patients with inhibitors to factor VIII and factor IX.

We have evaluated after RS, joint bleedings were decreased for all patients. The best results were obtained for all joints. No adverse events such as radioisotope leakage, local inflammatory reactions or malignancy development were observed during and after RS. In two joints for two patients, repeated injections were needed for better outcome.

CONCLUSION

Radioisotope synovectomy (RS) seems to be a safe and effective treatment for chronic synovitis causing recurrent joint bleedings.

| Patient No | Inhibitor (BU) | Age(month) | Knee | Elbow | Ankle | Other | Cancer | Anemia | Leak | Inflammation |
|------------|----------------|------------|------|-------|-------|------------|--------|--------|------|--------------|
| 1 | (-) | 192 | | L | - | - | - | - | - | - |
| 2 | (-) | 72/138 | R/L | R | - | - | - | - | - | - |
| 3 | (-) | 127 | - | - | - | metatarsus | - | - | - | - |
| 4 | (-) | 192 | - | R | - | - | - | - | - | - |
| 5 | (-) | 188 | - | L | - | - | - | - | - | - |
| 6 | 0,69 | 129 | R/L | - | - | - | - | - | - | - |
| 7 | (-) | 185 | R/L | - | - | - | - | - | - | - |
| 8 | (-) | 89 | - | - | R | - | - | - | - | - |
| 9 | (-) | 197 | - | R | - | - | - | - | - | - |
| 10 | (-) | 82/121 | - | - | R/R | - | - | - | - | - |
| 11 | (-) | 173 | L | - | - | - | - | - | - | - |
| 12 | (-) | 92/131/143 | L | L | R/R | - | - | - | - | - |
| 13 | (-) | 132 | - | - | R | - | - | - | - | - |
| 14 | 2,5-70 | 156/171/ | L/R | - | R/L | - | - | - | - | - |
| 15 | (-) | 136 | | R | R | - | - | - | - | - |
| 16 | (-) | 142 | R/L | - | - | - | - | - | - | - |
| 17 | (-) | 192 | - | - | L | - | - | - | - | - |
| 18 | (-) | 72/138 | R/L | R | - | - | - | - | - | - |
| 19 | (-) | 179 | R | - | - | - | - | - | - | - |

