

LONG-TERM RESULTS OF RADIOSYNOVECTOMY IN THE TREATMENT OF HAEMOPHILIC SYNOVITIS: ISTANBUL EXPERIENCE

Bulent Zulfikar¹, Cuneyt Turkmen², Onder Kılıcoglu³, F. Betul Cakır⁴, Basak Koc⁵, Fatih Dikici³, Fikret Bezglal⁶, Ahmet Kizir⁷, Remzi Tozun³, Omer Taser³

¹ Istanbul University (I.U) Cerrahpaşa Medical Faculty and Oncology Institute, İstanbul, The Hemophilia Society of Turkey, Turkey

²I.U Istanbul Medical Faculty (IMF) Department of Nuclear Medicine, İstanbul, Turkey

³I.U, IMF, Department of Orthopedics and Traumatology, İstanbul, Turkey

⁴Bezmi-Alem University, Department of Pediatric Haematology/Oncology, İstanbul, Turkey

⁵I.U, Cerrahpaşa Medical Faculty and Oncology Institute, İstanbul, Turkey

⁶The Hemophilia Society of Turkey

⁷I.U, Oncology Institute; Department of Radiation Oncology

OBJECTIVES

Despite recent advances including new therapeutic options and availability of primary prophylaxis in haemophiliacs, haemophilic synovitis is still a major clinical problem in a significant patient population worldwide. We retrospectively reviewed our ten-year experience with radiosynovectomy to determine the long-term results in the target joints of patients with haemophilic synovitis.

METHODS

The patients were referred from the Hemophilia Society of Turkey and evaluated by Institutional Hemophilic Arthropathy Council of Istanbul University. The indication for radiosynovectomy was clinical diagnosis of synovitis and presence of 3 or more haemorrhages into the same joint within the last 6 months. Radiosynovectomy was performed using Y-90 citrate in 82 knee joints and Re-186 sulfide colloid in 81 elbow, 8 shoulder, 74 ankle and 2 hip joints of 156 patients (median age 18,0 7,5 yrs; 136 haemophilia A, 17 haemophilia B and 3 vWD). All patients were boys except three girls who had vWD and acquired hemophilia. Eighteen patients had high responder inhibitors. The mean follow-up period was 47.6 25.6 months (range: 12 to 120 months). Re-bleeding after radiosynovectomy was used as an end point in patient time to progression (TTP) analysis.

Radioactive synovectomy

Type of disease	Hemophilia A	136 (18 inhibitor (+))
	Hemophilai B	17
	vWD	3
Age (years)	18 7,5	
Follow-up time (mean;months)	47,6 25,6 (range:12-120 months)	
Joints	Knee	82
	Elbow	81
	Ankle	74
	Shoulder	8
	Hip	2

*Y-90 for 82 joints and Re-186 for 165 joints

RESULTS

The median TTP was calculated as 72 months for knee and elbow joints, and 67 months for ankle joints in Kaplan-Meier analysis. There was no TTP differences between the joint groups (p:0.22). Longer TTP was evident in patients who had a greater reduction in bleeding frequency within 6 months after radiosynovectomy. No relation was found between the TTP and the following variables: age, type and severity of haemophilia,

CONCLUSIONS

Radiosynovectomy in target joints represents an important resource for the treatment of haemophilic synovitis, markedly reducing joint bleeding and long-term durability, irrespective of the radiographic stage and inhibitor status. Also if there is no bleeding in six months, this increases the RAS success.

REFERENCES:

1- C. Turkmen, O. Kılıcoglu, F. Dikici, F. Bezglal, S. Kuyumcu, O. Gorgun, O. Taser, B. Zulfikar. Survival analysis of Y-90 radiosynovectomy in the treatment of haemophilic synovitis of the knee: a 10-year retrospective review. Haemophilia (2014), 20, e45–e50.

