

# Results of ankle prosthesis in patients with severe haemophilic arthropathy - follow up -

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## INTRODUCTION

Arthrodesis is predominantly used in cases of haemophilic arthropathy of the ankle joint. The prosthetic replacement surgery can offer a new therapeutic option for ankle arthropathy, and is a well established operation in patients with rheumatoid arthritis and in post traumatic arthritis. Few cases are published about ankle replacement in haemophilic arthropathy.

The aim was to evaluate the efficacy and the outcome of ankle prosthesis in patients with severe haemophilic arthropathy.

## PATIENTS AND METHODS

5 patients with haemophilia A, 1 female with von Willebrand disease type 3 (vWD) and 1 patient with a severe deficiency of factor V showed an advanced state of joint destruction of the ankle evaluated by MRI/ X-rays. The presence of severe pain, radiological joint damage (MRI score/ Pettersson score) and a sufficient residual condition of mobility were the main indications for ankle replacement therapy.

Surgical interventions were performed under FVIII, FVIII/VWF replacement therapy, transfusion of fresh frozen plasma in combination with the use of tranexamic acid and the daily monitoring of the substitution.

## RESULTS

No complications (infection, intra articular ankle bleeding) and side effects were documented in any patient. Typical lymphatic oedema was resolved after 6 months.

Three years after ankle replacement, the patient with vWD required revision surgery due to a progressive decrease in mobility.

After a median follow-up of 7 months - 7 years all prostheses were still in place and did not show any signs of loosening. Clinical scores showed a good (n= 3) to excellent (n= 4) result in the patients.

## CHARACTERISTICS

	PATIENTS	AGE [years]	FACTOR ACTIVITY [%]
1 #	haemophilia A	30	FVIII:C < 1
2 #	haemophilia A	31	FVIII:C < 1
3 #	haemophilia A	32	FVIII:C < 1
4 #	haemophilia A	38	FVIII:C < 1
5 #	haemophilia A	44	FVIII:C 40
6 #	Von Willebrand disease type 3	45	vWF:RCo < 14
7 #	Factor V deficiency	24	FV:C < 1

## CONCLUSION

- The ankle prosthetic replacement surgery represents a therapeutic option in patients with haemophilic arthropathy.
- Prospective studies are needed to confirm the efficacy of ankle replacement compared with that of ankle fusion.

## REFERENCES

1 Tsailas PG, Wiedel JD. Arthrodesis of the ankle and subtalar joints in patients with haemophilic arthropathy. *Haemophilia* 2010. 2 Barg A. et al. Haemophilic arthropathy of the ankle treated by total ankle replacement: a case series. *Haemophilia* 2010. 3 Min Zh, Zhang Hm. Study on short-term effects of ankle replacement for the treatment of hemophilic arthritis. *Zhongguo Gu Shang* 2009. 4 Radossi P et al. Total ankle replacement for end- stage arthropathy in patients with haemophilia. *Haemophilia* 2008. 5 Rodriguez-Merchan EC. Ankle surgery in haemophilia with special emphasis on arthroscopic debridement. *Haemophilia* 2008. 6 Scholz R, Scholz U. The total ankle replacement for severe arthropathy in haemophilia. *Haemostaseologie* 2008. 7 van der Heide HJ. et al. The feasibility of total ankle prosthesis for severe arthropathy in haemophilia and prothrombin deficiency. *Haemophilia* 2006.

