Patient reported outcomes of pain after dorsal cheilectomy for painful Hallux Rigidus.

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Purpose

Hallux Rigidius is a painful degenerative disorder affecting the 1st MT joint. It affects approximately one in 45 of people over the age of fifty. The main symptom of the condition is pain in and around the joint worse on walking. A cheilectomy is a minor operative procedure used to treat hallux rigidus especially in patients whose primary complaint is pain. A cheilectomy involves debridement of the 1st MT joint by resecting osteophytes at the base of the proximal phalanx. Post operatively the patient must be non weight bearing on the foot for two weeks. There is some controversy regarding the effectiveness of the procedure on relieving the symptom of pain. Results from the procedure vary significantly. This retrospective study was designed to assess the effectiveness of the procedure on relieving pain. The Manchester-Oxford Foot and Ankle Questionnaire (MOXFQ) has been used as an outcome measure after foot and ankle surgery, endorsed by the British Foot and Ankle Society. The questionnaire contains 16 items compromising foot pain, effect of pain on mobility and effect on social interactions. Responses are graded on scale of 1 to 5, summing the total of the responses calculates the patient score. We retrospectively assessed patient-reported outcomes after dorsal cheilectomy for painful restriction of terminal dorsiflexion of the Hallux using the MOXFQ

Method

Patients who had previously had undergone a dorsal cheilectomy between January 2006 and January 2010 at the University Hospital of South Manchester were included in the study. They underwent a telephone conversation during which they were asked to complete the MOXFQ. All patients had been operated on by the senior author a minimum of 6 months prior to the commencement of the study. Post operative care in all patients was treating the operated foot in protective footwear and advised to be non-weight bearing on the treated foot for 2 weeks. They were then advised to mobilise on the foot as pain allowed. Basic demographic data was also collected. Data analysis was undertaken within SPSS version 13.025, with paired T tests being used to assess the statistical significance of any change. Statistical significance was taken at the 5% level throughout, with 95% confidence intervals (CIs).

Results

In total 32 patients took part in the study, 34% (11) male 66% female (22). The mean age of the patients was 61.6 (range 41-83). 18 patients had their right foot operated on and 14 patients had their left foot. The mean period between the operation and the MOXFQ assessment was 21.6 months (range 6 – 41 months)

The Mean post-operative score for the MOXFQ was 29.0 (range 14 - 67)

There was no statistically significant correlation between post operative period and MOXFQ score (p=0.367). There was a trend approaching significance between increasing age and lower MOXFQ score. (p= 0.124)

Conclusions

This study suggests that there may be a correlation between age and success of cheilectomy surgery in relieving painful hallux rigidus. With the present low numbers of participants this correlation has not reached statistical significance. There is no correlation between age or sex and MOXFQ score. Our
findings may suggest that pain relieving orthopedic surgery for hallux rigidus may have better results in the older population. However more research is needed to confirm whether this is a casual finding or a significant observation.