

ABSTRACT

TOPIC: Image Guided Radio Frequency Ablation of bone tumours

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AIM: To evaluate the therapeutic efficacy of Image Guided Radio Frequency ablation of benign bone tumour osteoid osteoma.

MATERIALS & METHODS:

1. Study group :

At our institution's orthopaedic department, patients who presented with history of non traumatic pain typically getting worse at night and relieved by taking aspirin with clinical diagnosis of osteoid osteoma were referred for radiological evaluation. The patients graded their pain at day and night on a visual analogue scale with grade 0 – no pain and grade 10 – unbearable pain. We evaluated 16 patients in whom RFA was performed for osteoid osteoma between November 2015 to August 2016. The lesions were located in the femur (n = 10), tibia (n = 5), fibula (n=1).

2. Study design :

Prospective Interventional study

3.Methods :

MDCT guided RFA procedure was performed using a STAR med VIVA RF Generator and cooled tip probe standard technique under spinal anaesthesia.

RESULTS:

Significant pain relief was observed in 15/16 patients in a 1 week post-operative visual analog scale. Immediate complications included a case of minor thermal skin burns in 3 patients, which healed on its own. There were no delayed complications. The average follow-up period was 2 -3 months. one patient (6.25%) had persistent of pain even after one month, following the ablation; this was due to residual lesion. Complete pain relief was achieved after a second ablation in that case. Thus, our primary and secondary clinical success rates were 93.8% and 100%, respectively.

CONCLUSION:

RFA is a safe, quick, minimally invasive, and extremely effective method for the management of osteoid osteomas.

Key words: Osteoid osteoma, RadioFrequency Ablation and Visual analog scale