



## British Sarcoma Group Conference 2009

### ABSTRACTS – ORAL PAPERS

9012

#### **Radiofrequency ablation (RFA) of pulmonary metastases is well-tolerated and feasible in patients with relapsed bone and soft tissue sarcoma**

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#### **Aims**

Standard curative treatment of pulmonary metastases in patients with sarcomas is surgical resection but this is associated with morbidity, and recurrence is common. Other methods of tumour ablation are required for patients unsuitable for surgery.

#### **Methods**

Retrospective analysis of patients with relapsed sarcoma referred for RFA at a single centre.

#### **Results**

Eight patients aged 17-90 years (median 45), 4 with primary bone tumours and 4 with soft tissue sarcomas underwent RFA a median of 3.7 years (1.8-12) from diagnosis, after a median of 3 (1-5) recurrences and 1 (1-5) thoracotomies. Sixteen lesions 0.4-5.3 cm (median 1.5) were percutaneously ablated under CT fluoroscopic-guidance. Procedural complications included 3 asymptomatic pneumothoraces and 1 haemopneumothorax that required drainage. One patient developed a temporary brachial plexus injury, and a 90 year old developed urinary retention. At the first outcome assessment at approximately 3 months, 12/15 (80%) evaluable lesions demonstrated no active tumour at site of ablation. Three lesions measuring 1.3, 4.5 and 5.3 cm, in two patients demonstrated residual active tumour; one patient also had progressive disease (PD) in the contralateral lung and another had PD outside the lung. With a median CT follow-up of 7 months (6-15), 3 further patients had progressed, 2 relating to the RFA site and one with disease progression in another site in the lung and in the bone. Two patients (25%) demonstrated no active disease.

#### **Conclusions**

RFA is well-tolerated and demonstrates efficacy in patients with advanced metastatic sarcomas for whom surgical intervention is not appropriate. Larger lesions are less successfully ablated. Randomised studies are required to demonstrate whether this may provide an alternative to metastasectomy in selected patients.