

**FC-123****Chondrosarcoma surveillance – The Stanmore experience****M. Brown, P. Gikas, J. Jagiello, W. Aston, J. Skinner, T. Briggs, R. Pollock***Royal National Orthopaedic Hospital, London, United Kingdom*

Introduction: Chondrosarcoma (CS) represent a heterogeneous group of tumours ranging from indolent and low-grade (grade 1) to aggressive and high-grade with the ability to metastasise (grade 2 and 3). No guidelines exist for post-operative CS surveillance. Our unit monitors low-grade CS treated with curettage according to the following protocol: clinical review with surgical site radiographs three monthly during year one, 6 monthly during year two, then annually until discharge at the end of year five. High-grade CS are monitored as follows: clinical review with chest and surgical site radiographs as follows: three monthly for two years, six monthly until the end of year five, then annually until discharge at the end of year ten. Suspicious symptoms or radiographic lesions are investigated with CT or MR. We analyse CS surveillance at one of the United Kingdom's largest bone sarcoma units with the aim of proposing a protocol for general use.

Methods: A retrospective review of 50 consecutive CS cases diagnosed between 2008 and 2010 was completed. Exclusion criteria included CS managed conservatively or affecting the small bones of the hand, and cases with incomplete clinical information. Data was collected from patient notes, radiology and histopathology records.

Results: A total of 50 patients with a mean age 52.4 years (range 24-81) were included (33 males; 17 females). Twenty-four low-grade and 26 high-grade CS cases were monitored according to the above surveillance protocol. Mean follow-up was 4.5 years (range 1.6-6.5) after deaths were excluded (n=12). Local recurrence was identified in 2 low-grade and 5 high-grade cases using routine plain radiographs or MRI following symptom change. Pulmonary metastases were identified in 8 cases (mean onset 16.6 months, range 3-32). Chest radiographs identified metastases in 5 cases, with 3 cases identified on CT. No recurrent or metastatic disease was missed, with changes in symptoms (i.e. pain) or radiographic appearance prompting review with CT and/or MR imaging.

Conclusion: Monitoring CS cases according to our evidence-based surveillance protocol facilitates an appropriate balance between the frequency of out-patient clinical and radiographic review and the need to identify recurrent or metastatic disease at the earliest opportunity in order to achieve optimal patient outcomes.