Mapping Early Bone Marrow Lesion and Pain Development in Spontaneous and Load-induced mouse models of OA

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What is osteoarthritis (OA)?

OA is a disease characterised by multiple soft and mineralised joint tissue changes, which have relationships that remain unresolved

Figure 1. Features of healthy (left) compared to OA joint (right)

Aims and hypotheses

Characterise the temporal emergence of SCC and their spatial relationship to cartilage lesions in ageing STR/ort mice with increasing OA severity

Hypothesis: that SCC will increase in prevalence, number and volume with increasing age and OA grade, and will be closely aligned with the OA-prone sites of articular cartilage on the medial tibial plateau of STR/ort mouse joints

Methods and work flow

1. Left hindlimb selection (from archived samples):

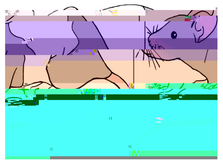

Figure 3. Number of limbs per group

2. Knee joint imaged by µCT for SCC volume measurement

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References

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