

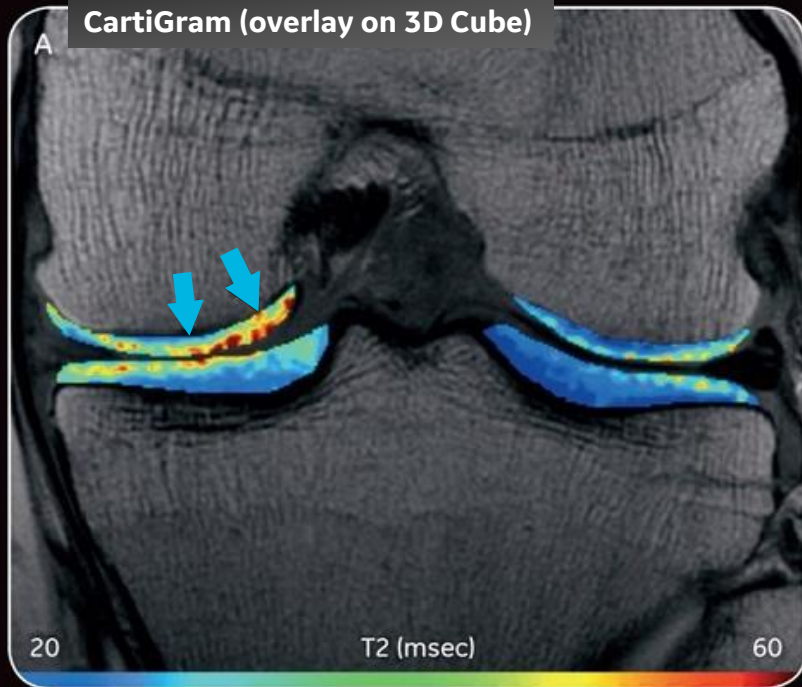


OrthoWorks

Characterizing cartilage
before and after surgery

CartiGram

Provides non-invasive, quantitative assessment of cartilage



Clinical case:

- Prolongation of T2 relaxation time, indicative of matrix depletion in the medial femoral condyles.
- CartiGram correlates with arthroscopic finding of moderate fibrillation and cartilage loss.

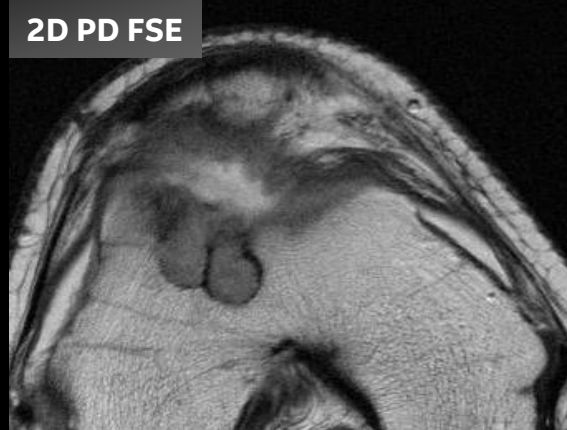
Non-invasive assessment of cartilage repair

Clinical case:

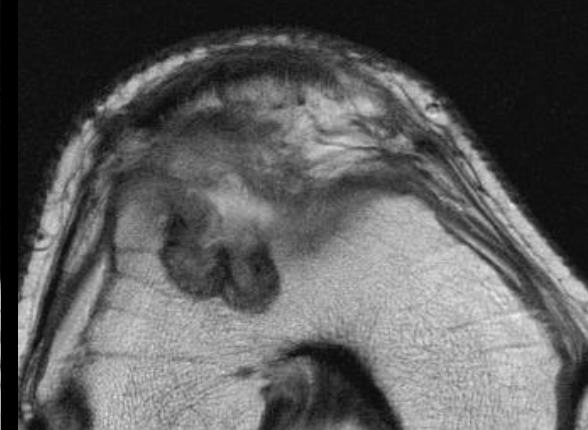
- Late teen with biphasic scaffold plugs into trochlea
- MRI demonstrates progressive maturation of bone and cartilage phase of plugs
- [CartiGram](#) (T2 map) demonstrates progressive organization of the repaired tissue
- Patient is active and required no further surgical procedure

8 months post op

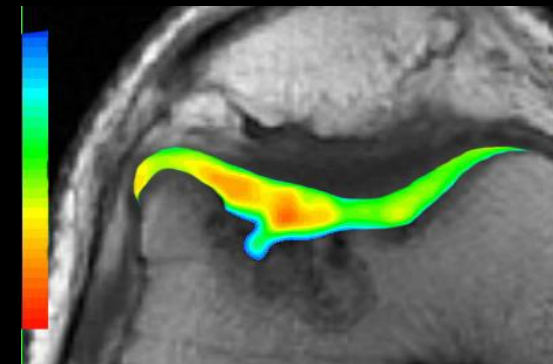
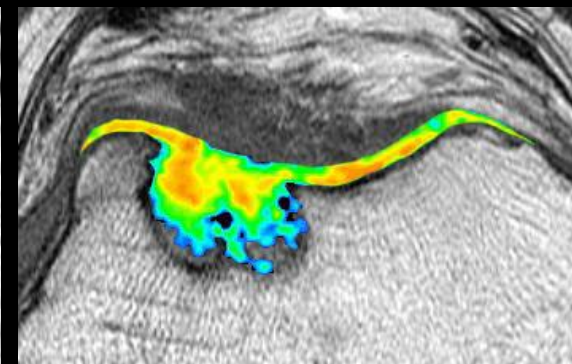
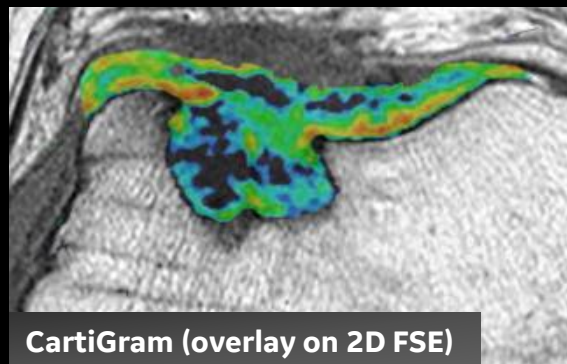
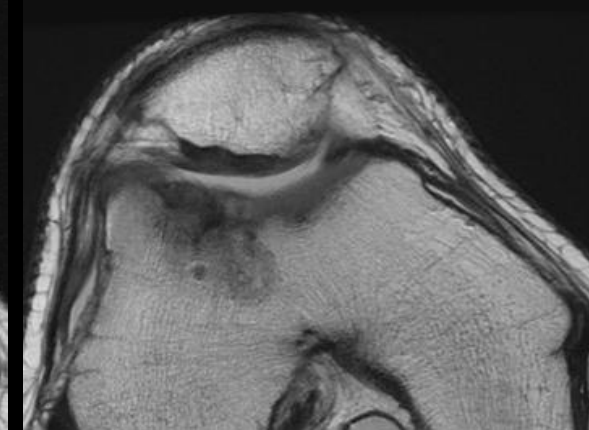
2D PD FSE



13 months post op



27 months post op



Non-invasive assessment of cartilage repair

Pre op

2D PD FSE

**18 months post OATS
(first repair site)**

**18 months post scaffolding
(second repair site)**

Clinical case:

- Pre-operative MRI shows active delamination of cartilage with flap formation over lateral patellar facet with prolonged T2 values with [Cartigram](#)
- 18 month post-operative MRI shows placement of an autologous osteochondral plugs (middle) and synthetic biphasic acellular plug (right)
- The autologous plug shows complete osseous incorporation with intact overlying cartilage and small fissures at the interface with native cartilage
- The synthetic plug shows incomplete osseous incorporation with central depression of the cartilage phase with incomplete fill

