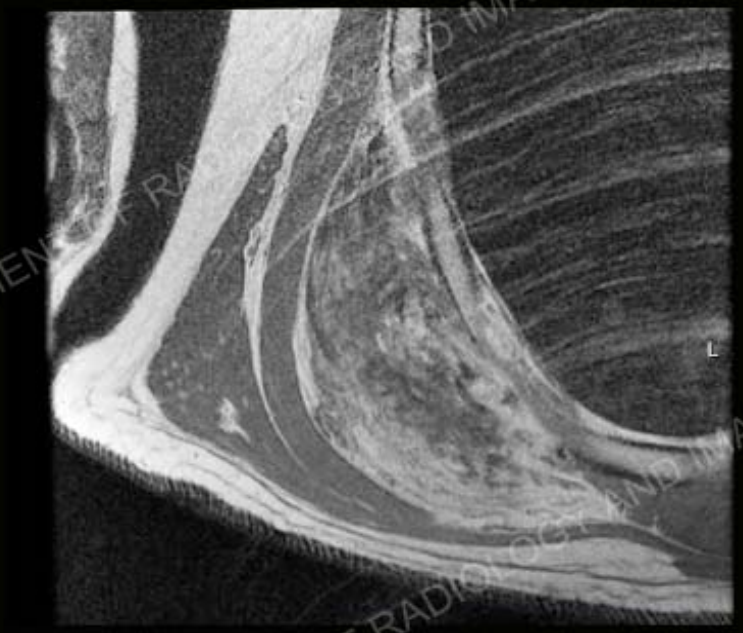
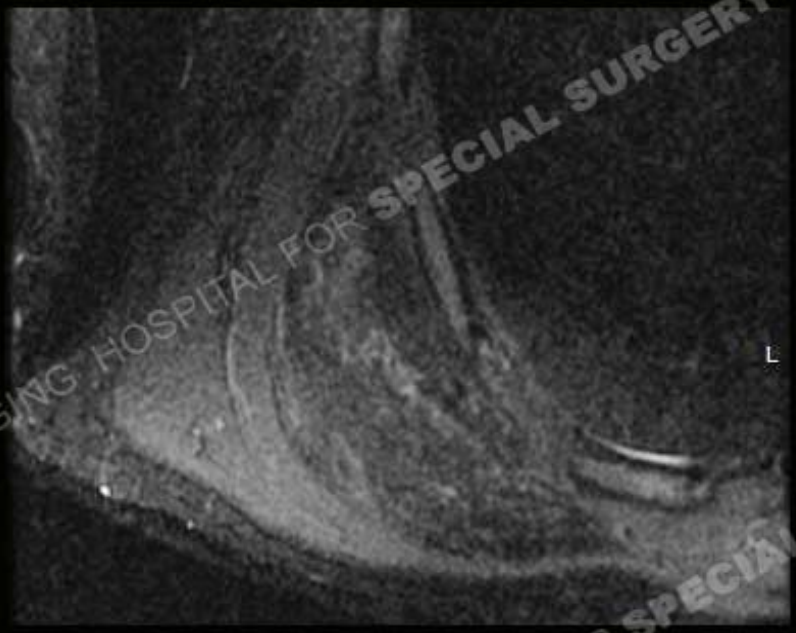
History: 63 year old man with asymptomatic right sided mass
(Initial images are from 2006 with a follow up from 2009)





Axial PD

Axial IR

Anterior

Posterior

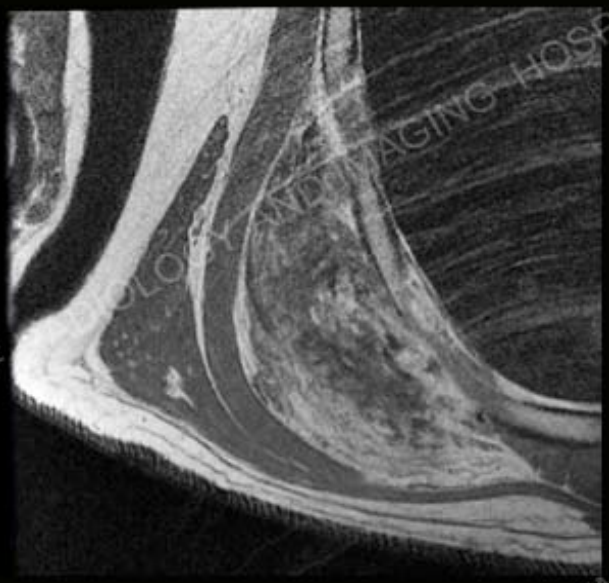
Sagittal PD

Axial PD 2009

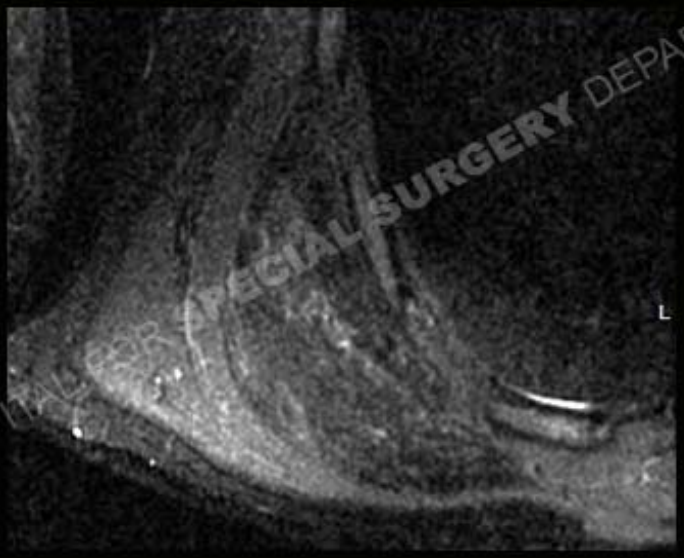
Axial PD 2006

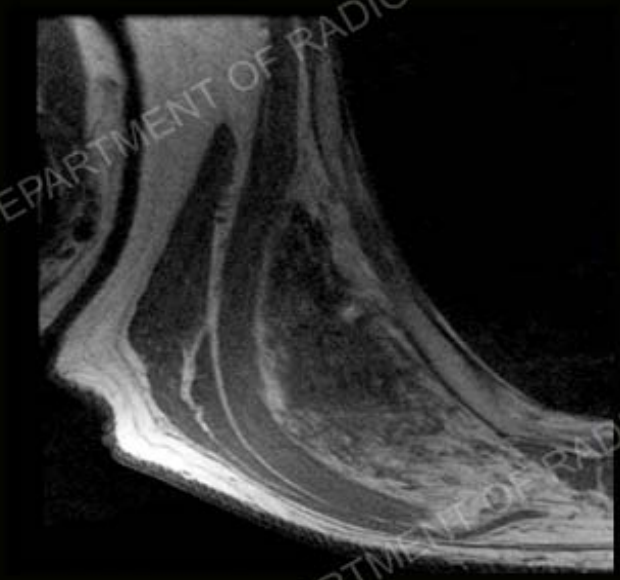
Coronal PD 2009

Sagittal PD 2009 -
Same orientation as prior

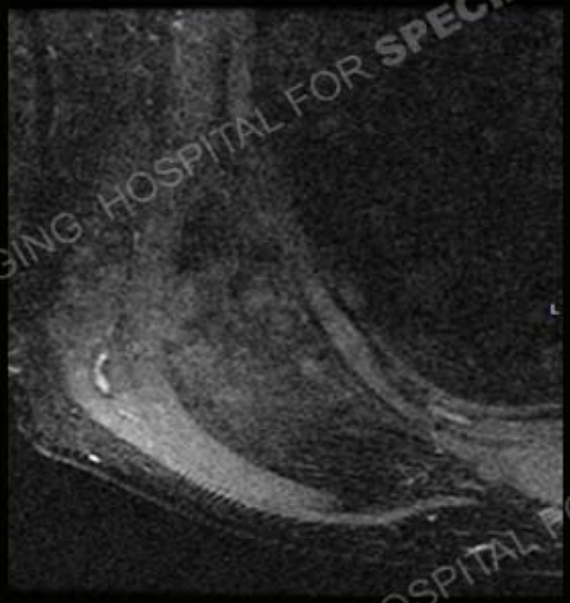


Axials
2006



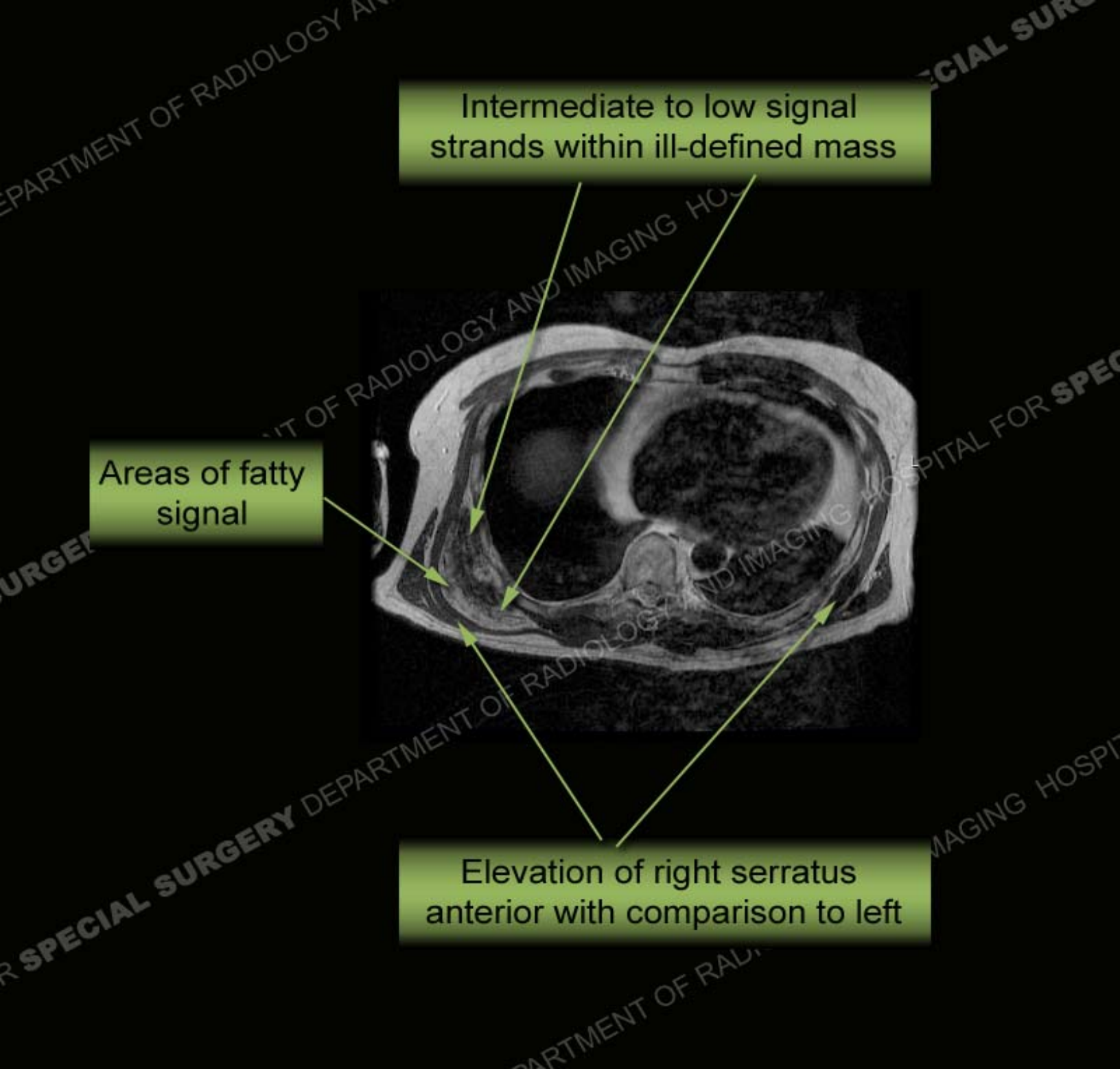


Axials
2009

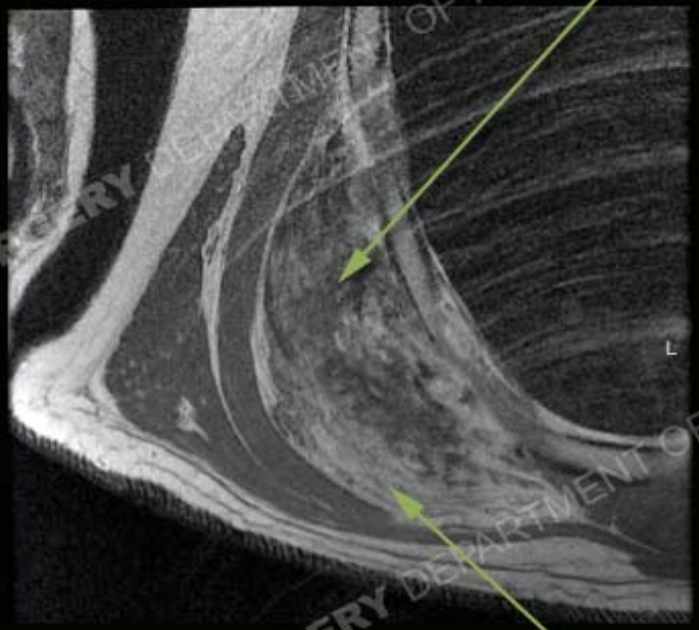


Findings

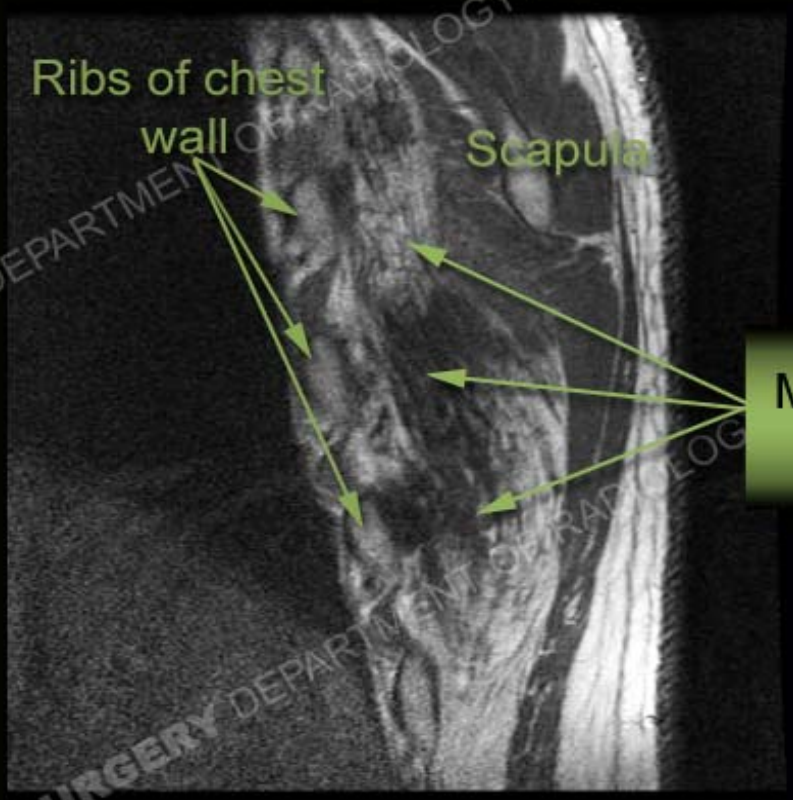
- Heterogeneous mass seen insinuated between the inferior tip of the scapula and the chest wall. The mass is seen deep to the serratus anterior muscle causing elevation of the muscle. The mass has rather ill defined borders. Areas of intermediate to low signal are seen on all pulse sequences with other areas that demonstrate fatty signal. The underlying bone is normal and no changes are seen when comparing the two exams.


Intermediate to low signal strands within ill-defined mass
Areas of fatty signal
Elevation of right serratus anterior with comparison to left

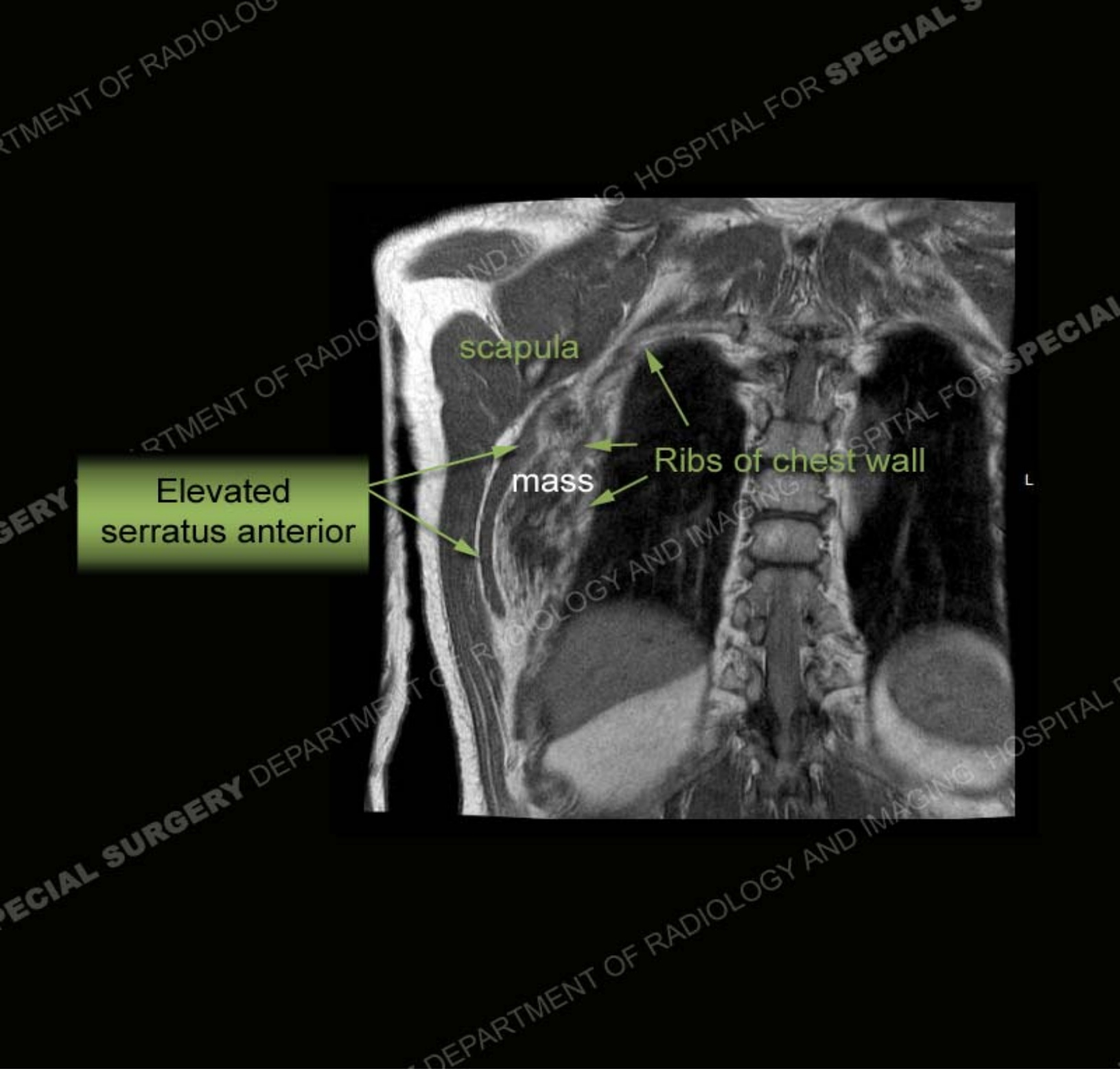
Intermediate to low signal bands on all pulse sequences of ill defined mass

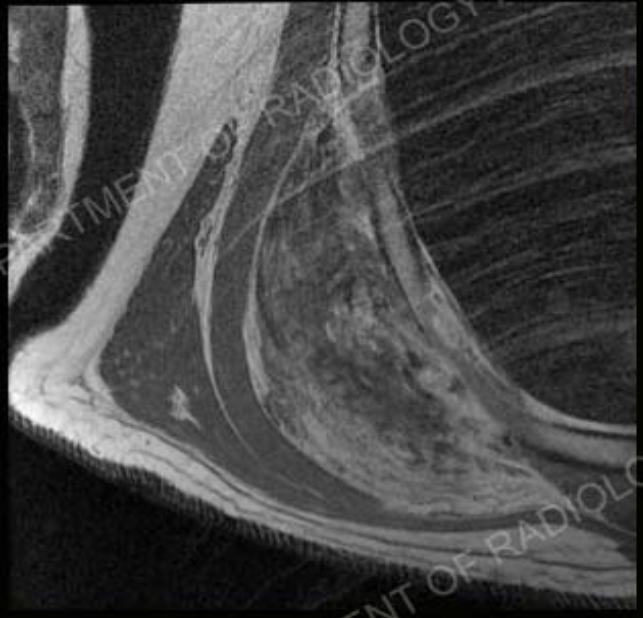


Fat signal intensity

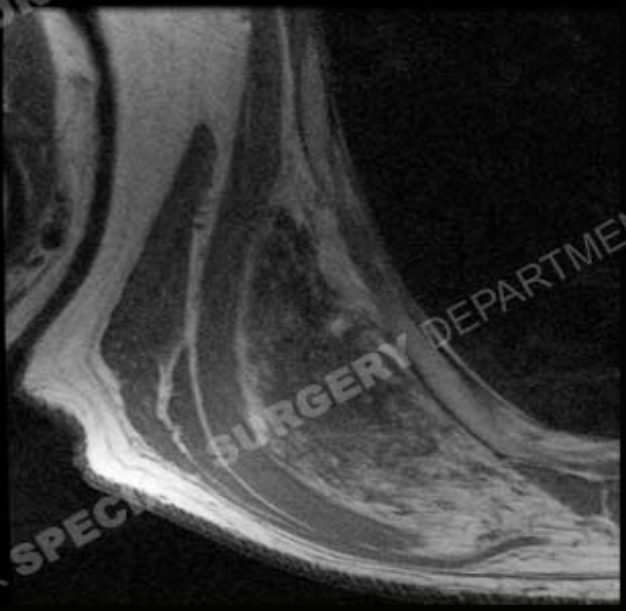


Mass between inferior tip of scapula and chest wall


scapula
Ribs of chest wall
mass
Elevated
serratus anterior
L

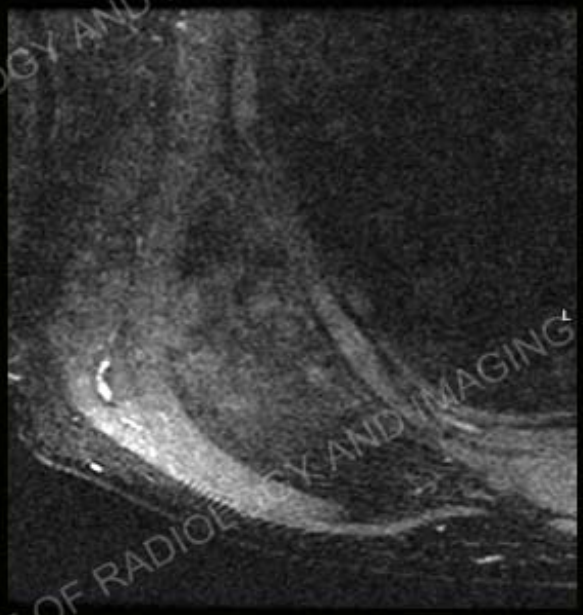


Axials
2006



Axials
2009

No
change
from
'06
to '09



Diagnosis: Elastofibroma Dorsi

- Elastofibroma Dorsi is a benign soft tissue tumor which is typically seen in the older patient population and is more common in women than men. It is classically found, as in this case, at the tip of the scapula or infrascapular and is interposed between the scapula and the chest wall. It is often found deep to the serratus anterior or latissimus dorsi muscle. The mass is thought by many to be perhaps in part related to mechanical irritation.

- Given that the mass is composed of streaks of fibrous tissue interspersed with fatty elements, it yields intermediate to low signal on most pulse sequences but with other foci of fat signal as is seen in this case. It lacks an overlying capsule accounting for its ill defined or somewhat inflitrative pattern. The mass is benign and if seen in a typical location needs no further follow up. Approximately half of the time patients state associated pain, snapping, or clicking that may precipitate excision with recurrence being particularly rare.

Resources:

- http://radiographics.rsna.org/content/26/6/1873.full
- Resnick. Diagnosis of Bone and Joint Disorders. 4th Ed. 2002.