

# Diffusion-weighted MRI and detection of residual/ recurrent cholesteatoma

Therese Ovesen & Helle Wulf Eskildsen  
Dept. of ORL & HNS  
Dept. of Neuroradiology  
Aarhus University Hospital, Denmark

# MRI and cholesteatomas

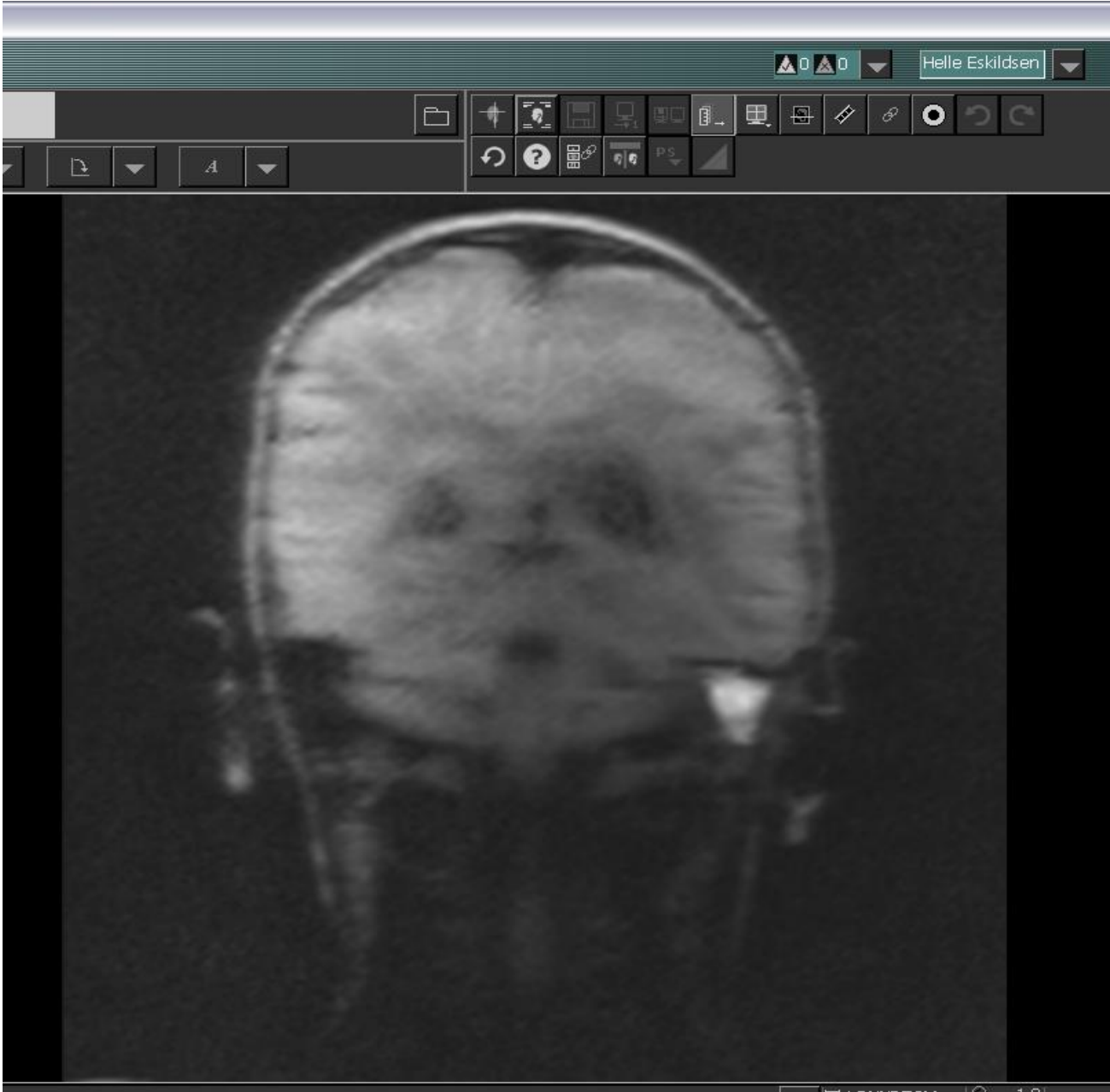
- Inclusion:
- Previous surgery due to cholesteatoma
- No otomicroscopical suspicion of residual/recurrence
- New symptoms (e.g. pain, fullness, vertigo)  
or
- End of a five year follow up

# MRI and cholesteatomas

- MRI protocol:
- Contrast 30 minutes before scan.
- 1.5 Tesla
- T2 3D
- T1 coronal 2 mm
- T1 axial 2 mm
- Diffusion coronal

# MRI and cholesteatomas

- 15 patients
- 5-50 years (8<18 years)
- 14 + cholesteatoma, one – cholesteatoma
- 11/14 intense signal, 3/14 weak-moderate signal





# MRI and cholesteatomas

- Three patients had two or three isolated cholestatomas: all could be identified by MRI (2-7 mm), except one (app. 3 mm)
- 100 % agreement between MRI and surgical findings as regards patients
- 95 % agreement as regards cholesteatomas

# MRI and cholesteatomas

- Detection limit of app. 2-3 mm
- MRI is a valid (high sensitivity) tool in the identification of residual/recurrent cholesteatomas in patients not suspected of recurrence
- We need more experience of the specificity (four MRI negative will be operated in October/November)