

# CAR 2023

## Advancing Imaging Care Through Innovation

### Portable Brain MRI in a Remote Northern Canadian Setting – The Preliminary Experience of Moose Factory Implementation



Canadian Association of Radiologists  
L'Association canadienne des radiologistes

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# Portable Brain MRI in a Remote Northern Canadian Setting: The Preliminary Experience of Moose Factory Implementation

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# Disclosure of Conflict of Interest

I do not have a relationship with a for-profit and/or a not-for-profit organization to disclose

# Kingston Health Sciences Centre

# HYPERFINE



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# Purpose

Traditional Model: patient transport to MRI suite



Portable POC MRI:  
Scanner comes to patient bedside



# Ultra low field POC MRI

## Specifications:

Height: 55" (140cm)

Width: 34" (86cm)

Power: 15A, 110V

Weight: 1,400lbs (630kg)







# Implementation

- Community Engagement
- Setup
- Staff training



# Workflow

- Trained staff performs scan
- Images sent to KHSC PACS
- Reported by Neuroradiologists





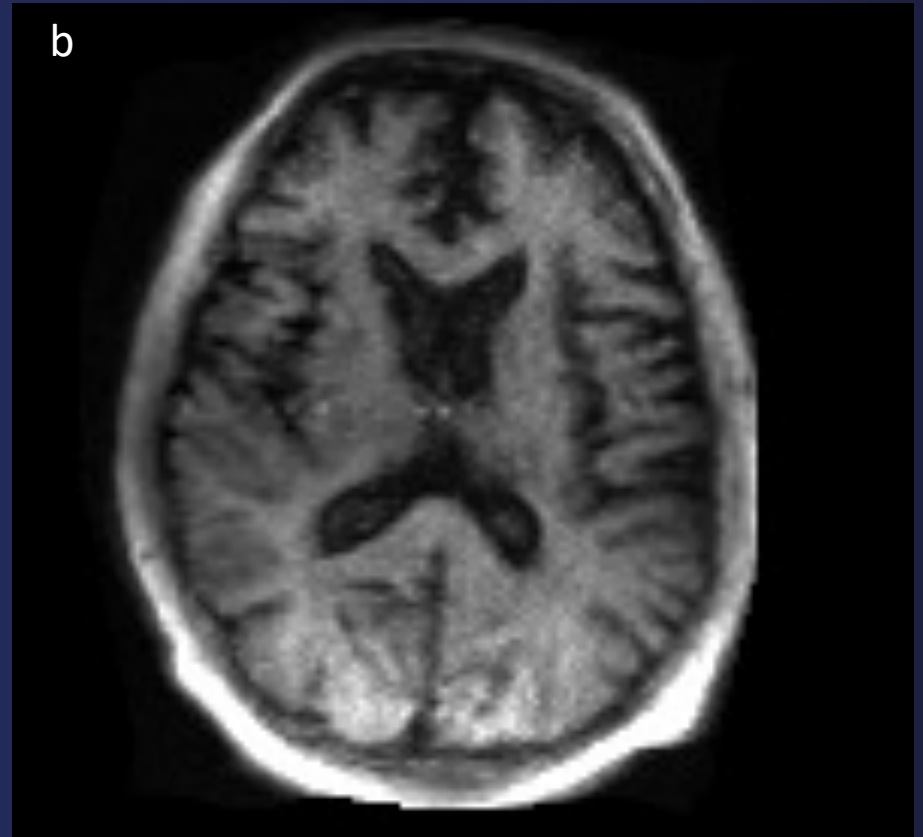
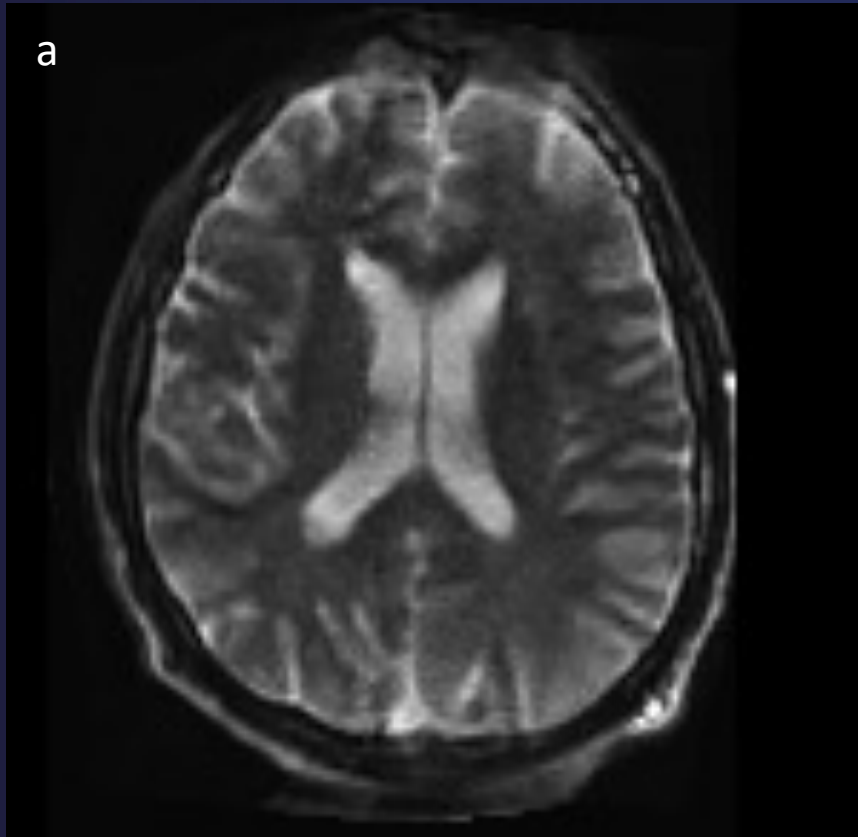
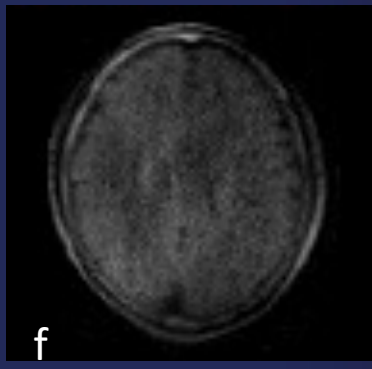
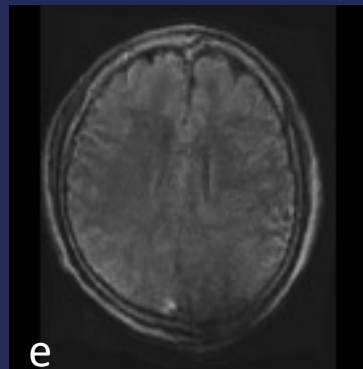
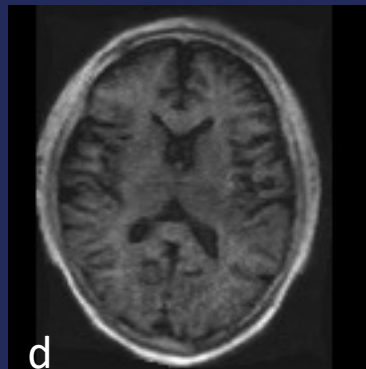
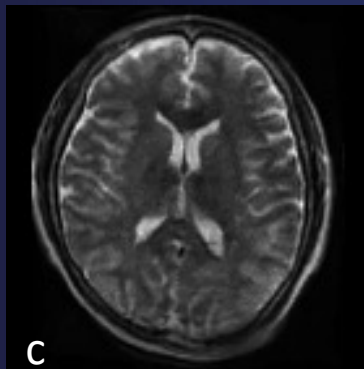
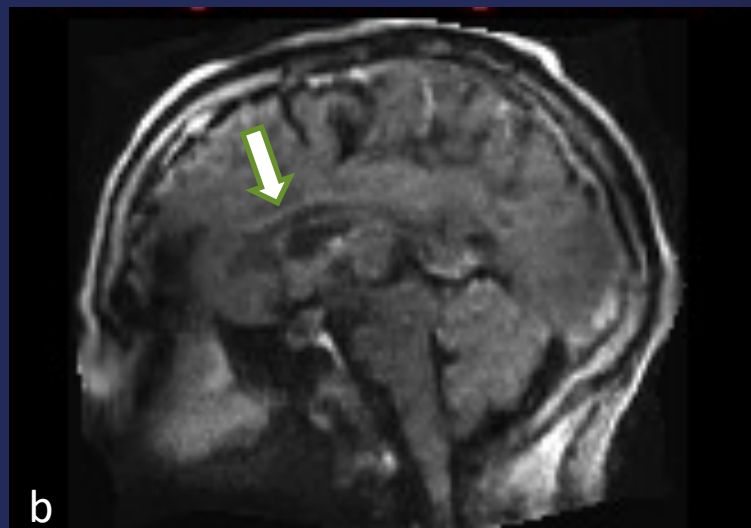
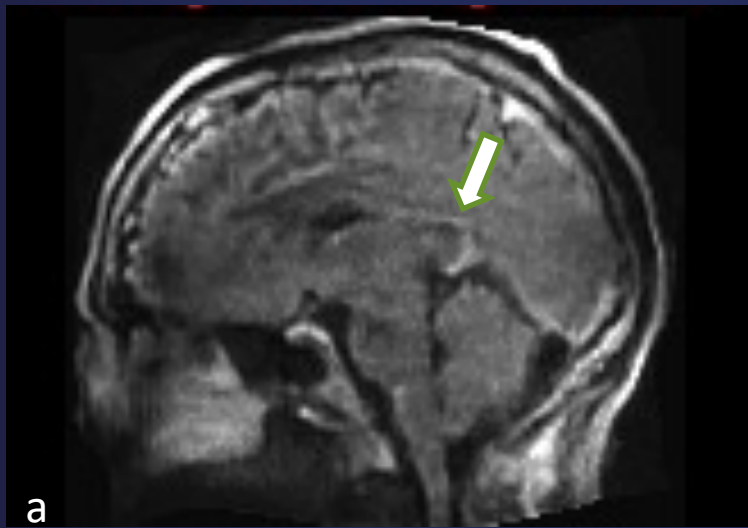


Figure 1. 52M presenting 2 days post head injury. Axial T2 (a) and T1 (b) portable MRI





# Learning Points

1. Staffing
2. IT connection/PHI
3. Communication

*Uncertainties with early adoption of new technology*

# Conclusion

- Potential to revolutionize MR imaging access
- The model of linking Northern community sites with tertiary care centers is a viable template for broad implementation of POC MRI
- Guide the use of POC MRI at other Canadian and international sites, especially in remote communities

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# Thank you!



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