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9.12(土) - 13(日), 2025

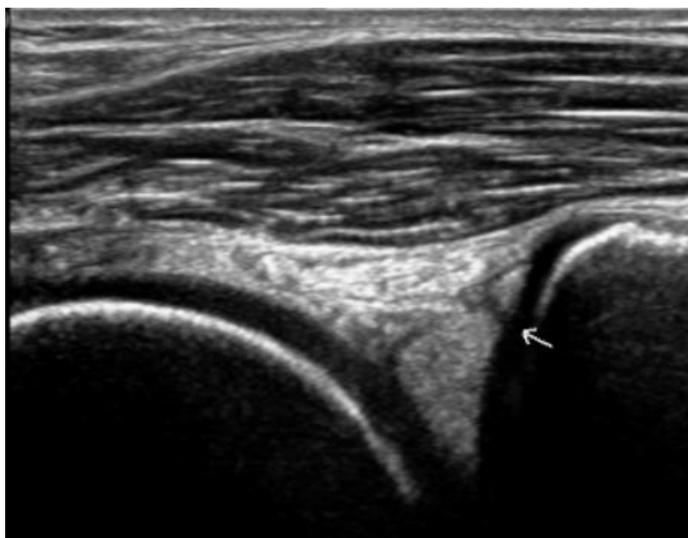
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1 Athlete Management
2 Sports Traumatology

Burt Klos MD PhD ICONE Sports trauma research

Dynamic Ultrasound Meniscus Imaging and treatment

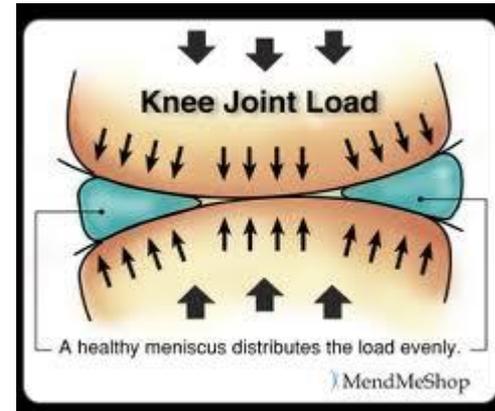


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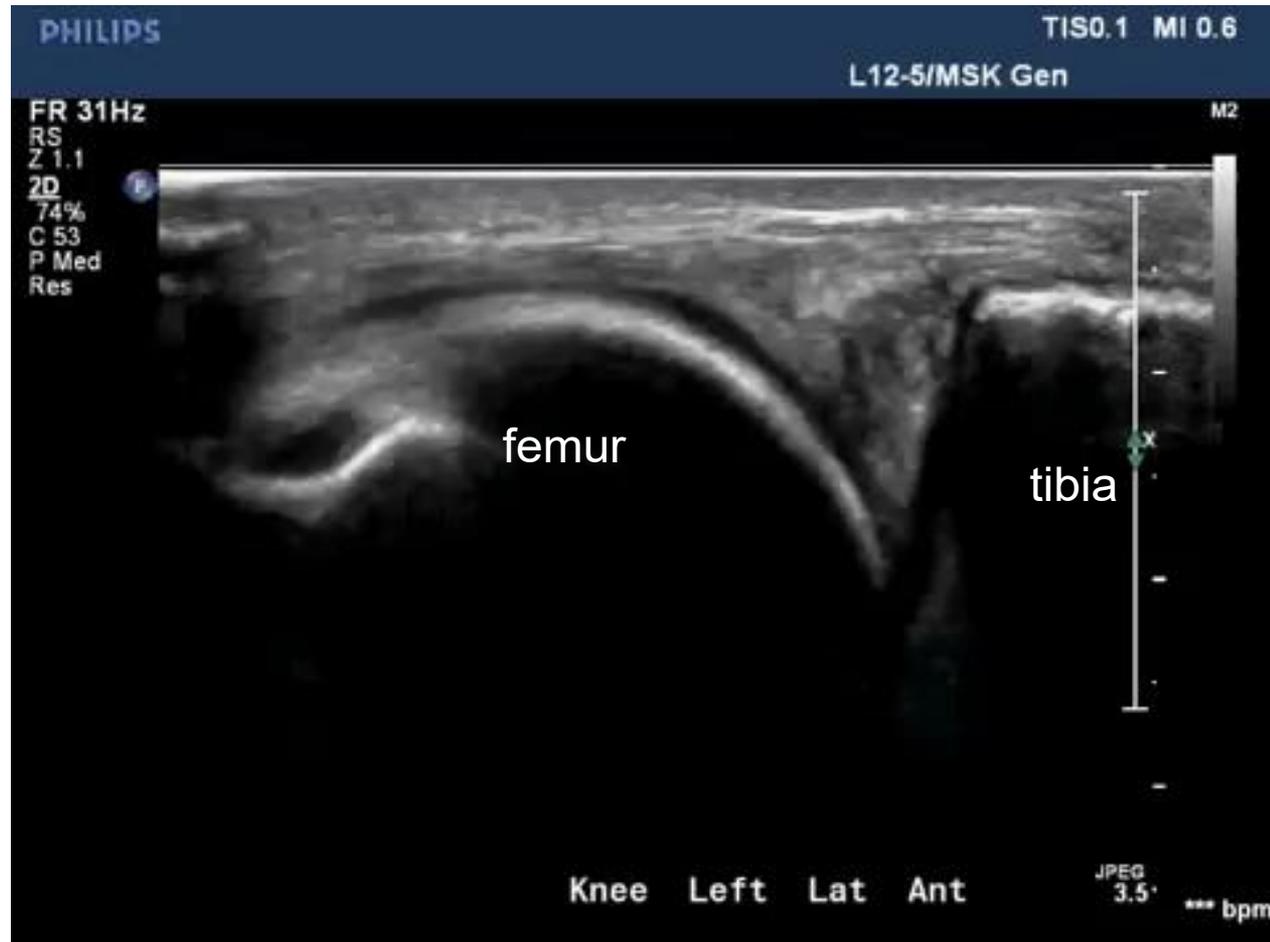
Meniscus lesions

- Conservative treatment
- Operative treatment
- Meniscal repair

- Important factor
- Ligamentous insufficiency

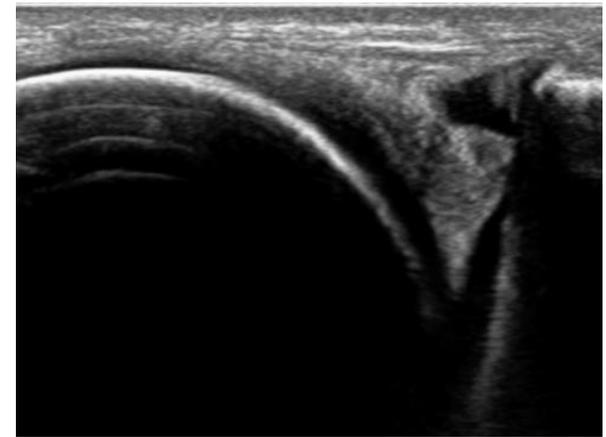
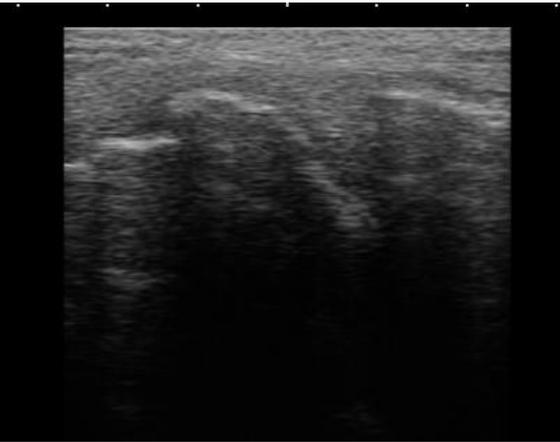


Dynamic HR meniscus ultrasound

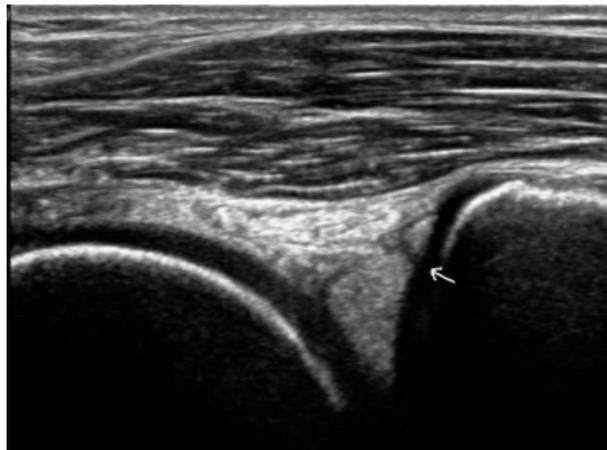


Improvements image quality

2006-2008 2008-2010 2011-2014



2015-
2018

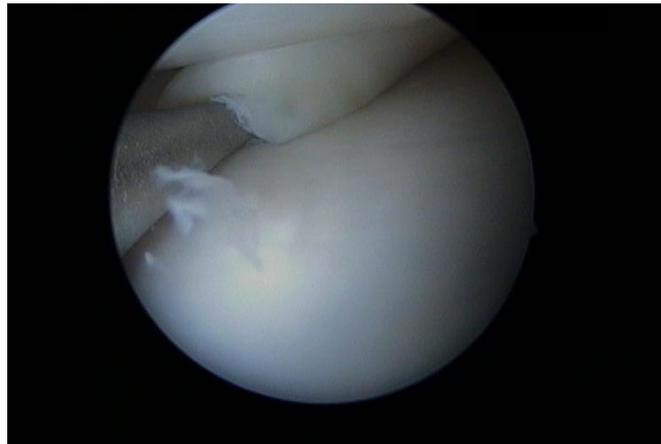


Ultrasound positions prone ,rotation, supine ,hyperflexion



Meniscus MRI might not be golden standard

- Collateral lesions lateral / ALL / Segond MRI not reliable (Devitt / Feller / Whitehead KSSTA 2017)
- RAMP Hidden lesions B Sonnery Cottet 2015
- False negative (MMPH) in ACL # Ahn 2016 45%

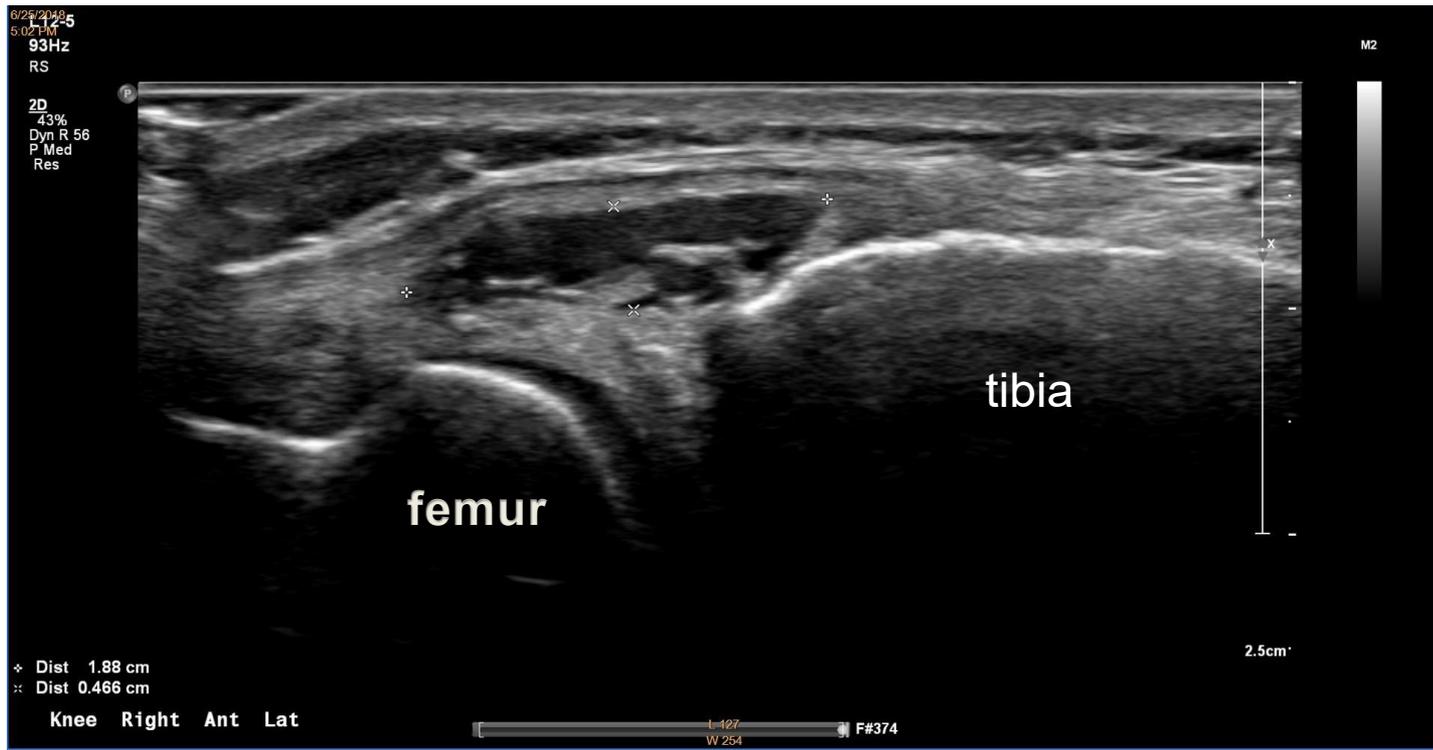


Meniscus US > Arthroscopy

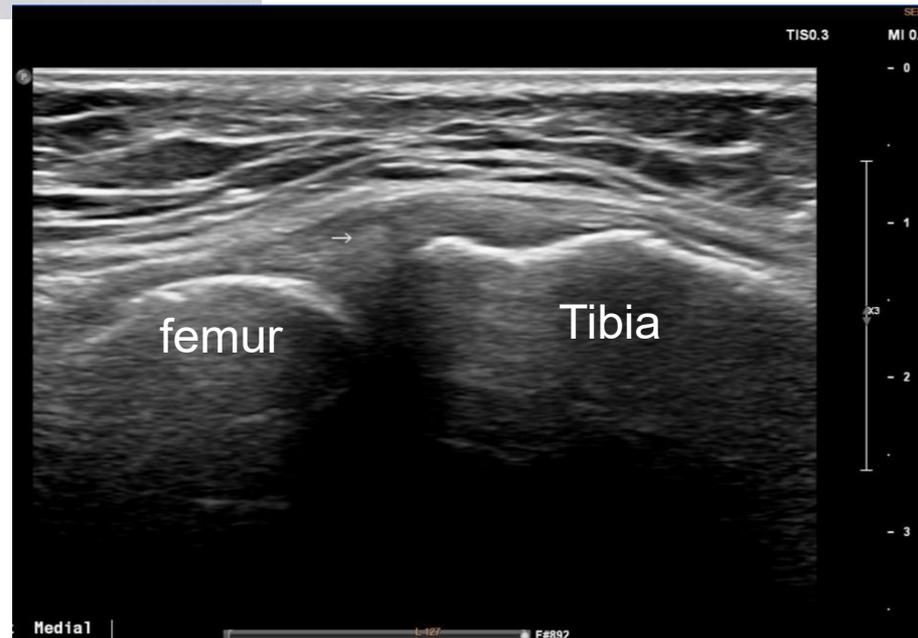
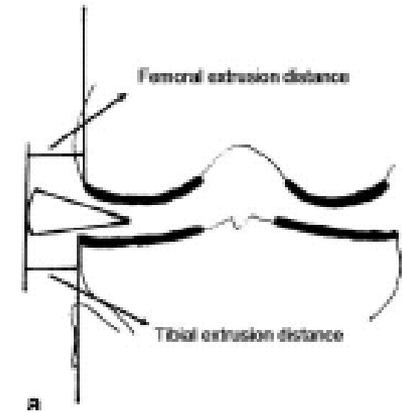
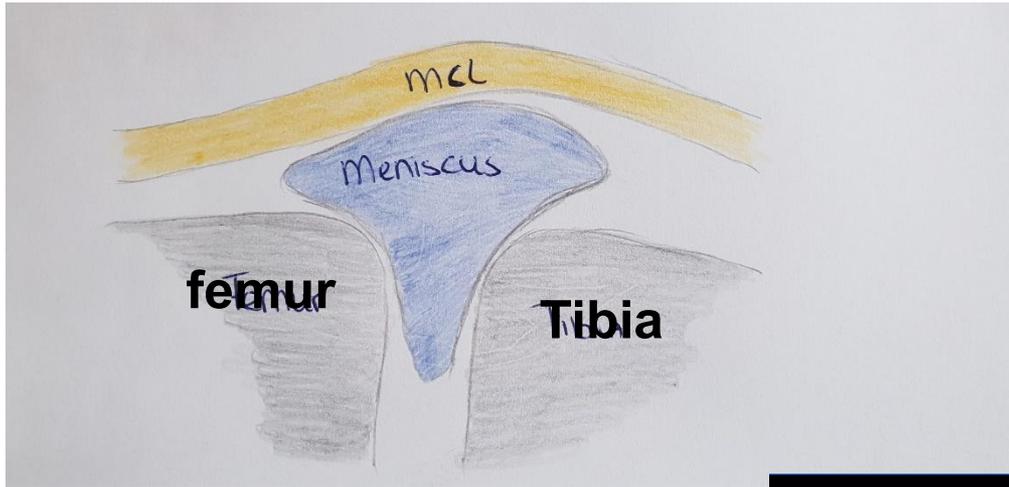


Meniscus cysts

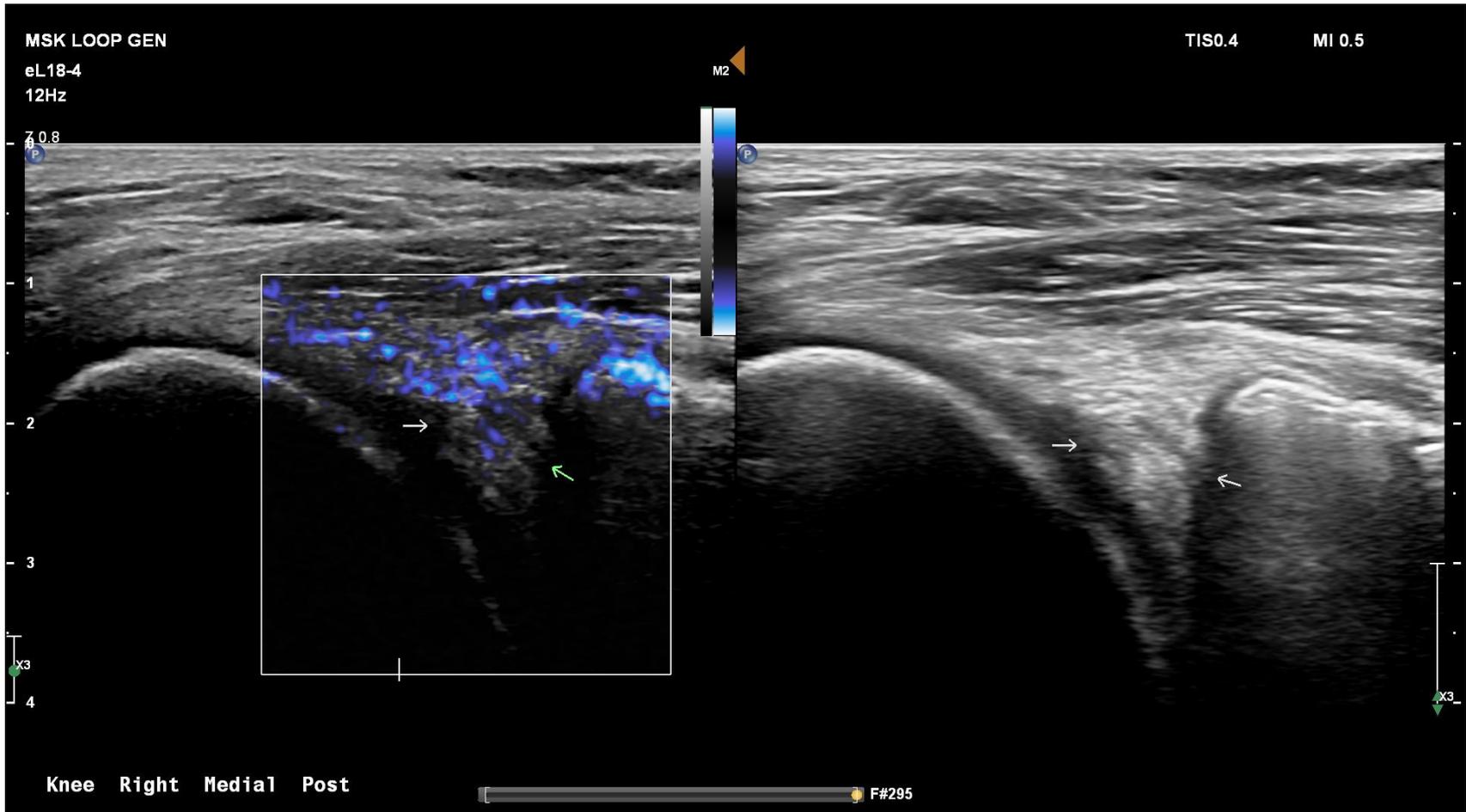
- Lateral meniscus with radial tear .
- Outside layer of cyst (thick/thin) might predict need to resect the cyst wall .



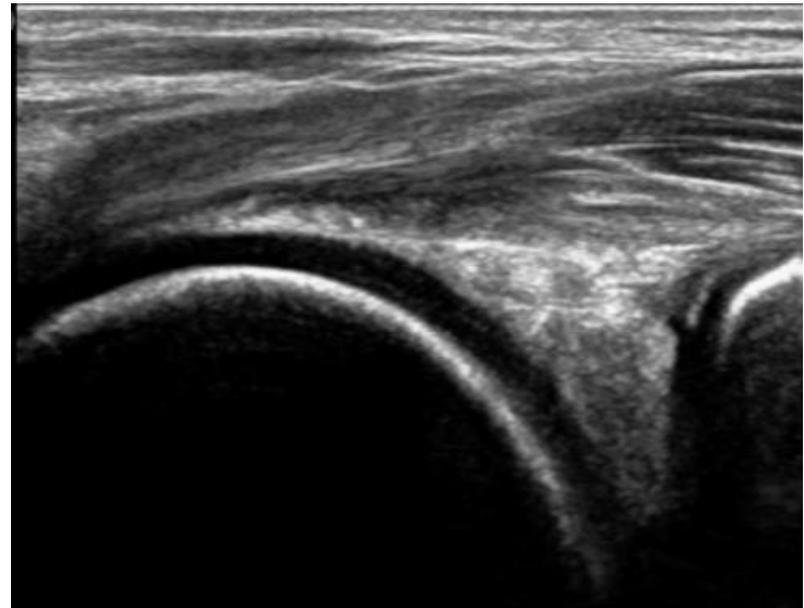
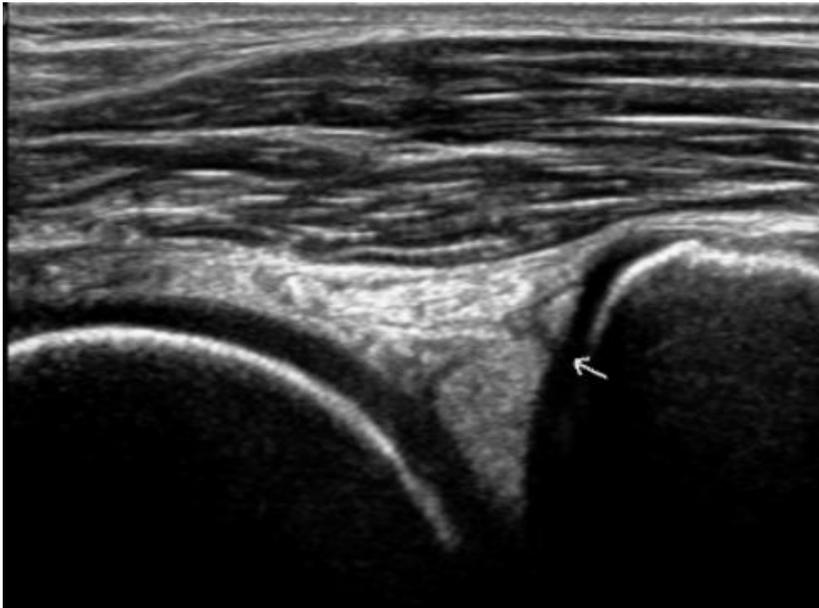
Meniscus extrusion



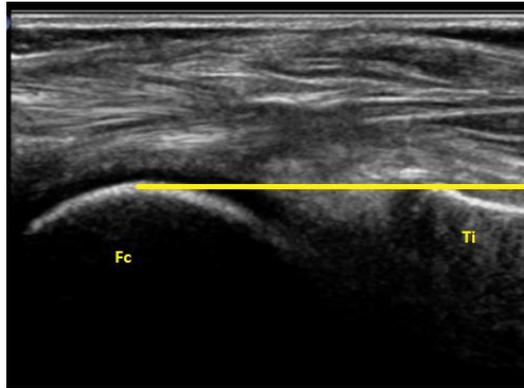
Meniscus vascularisation



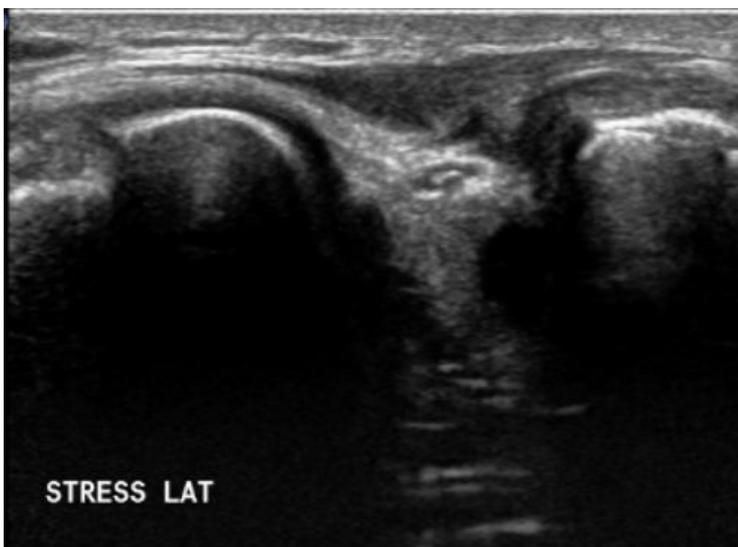
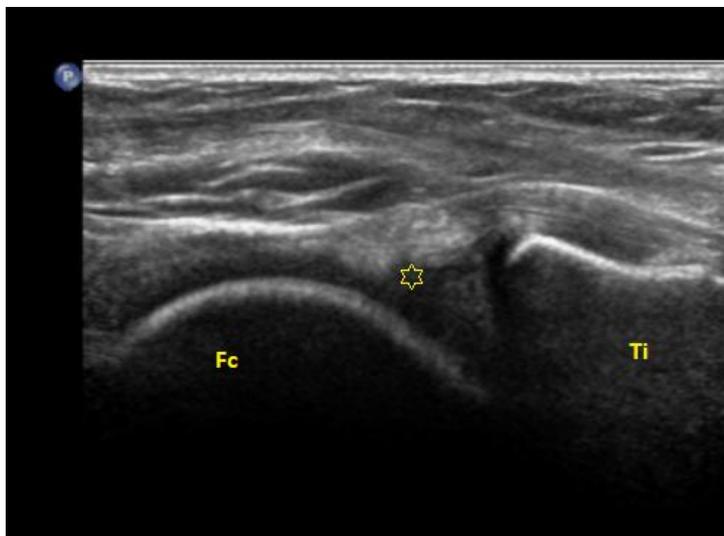
Sequential follow up in ACL / monitoring the meniscus @ 4 weeks conservative treatment



Meniscus / ACL def



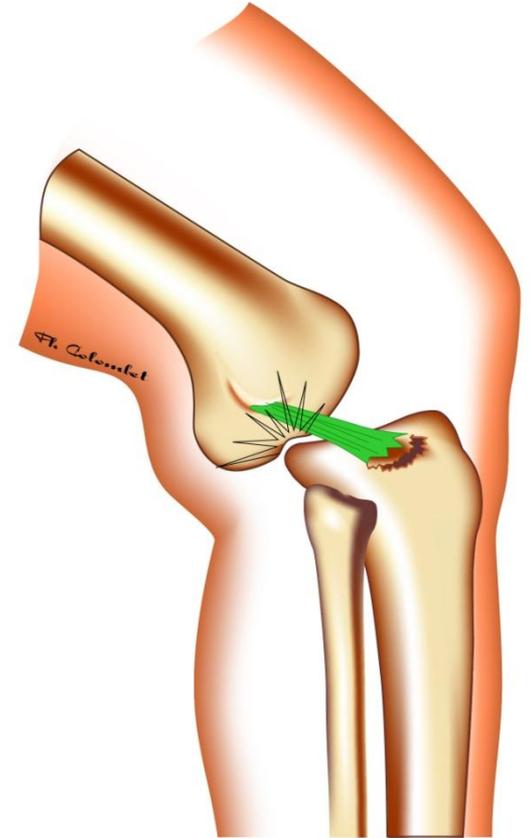
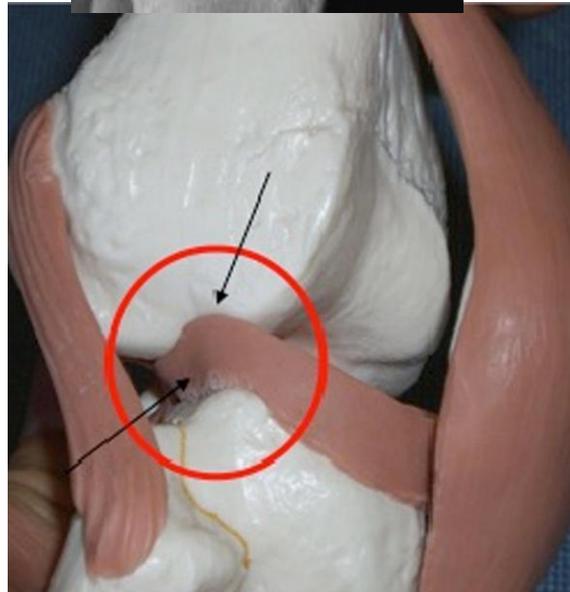
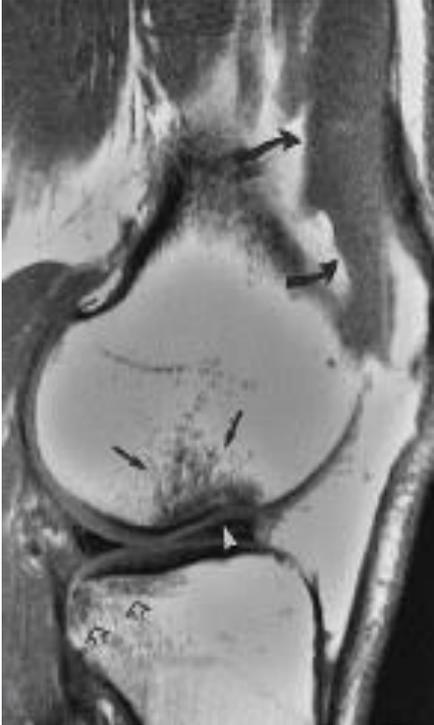
Meniscus repair follow up

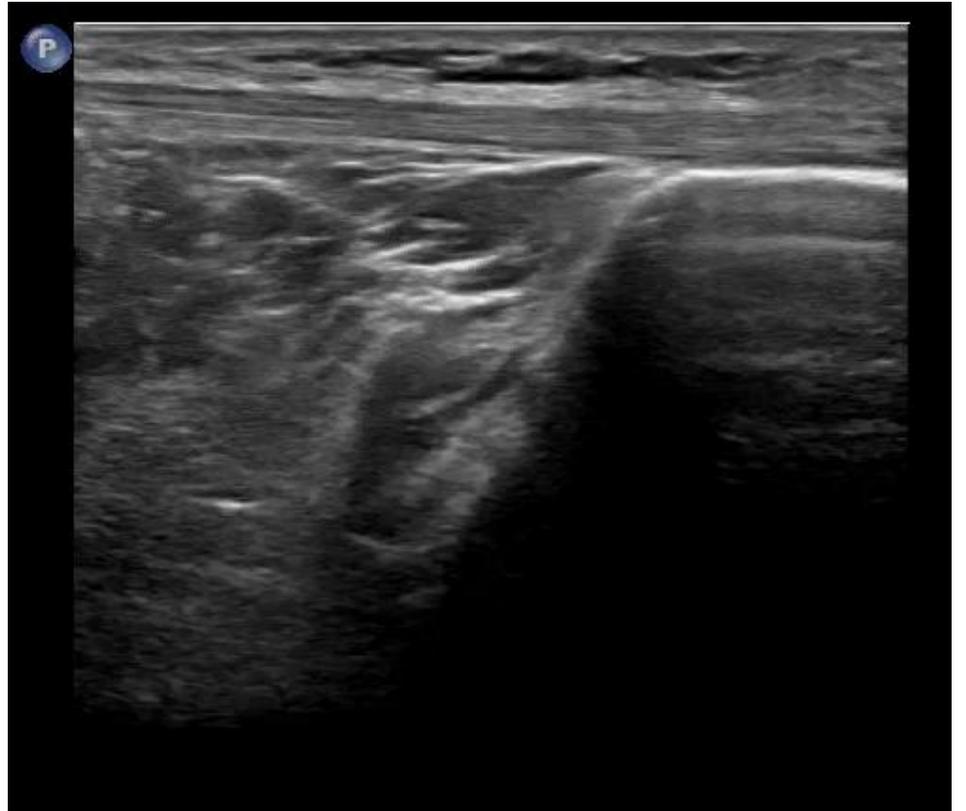
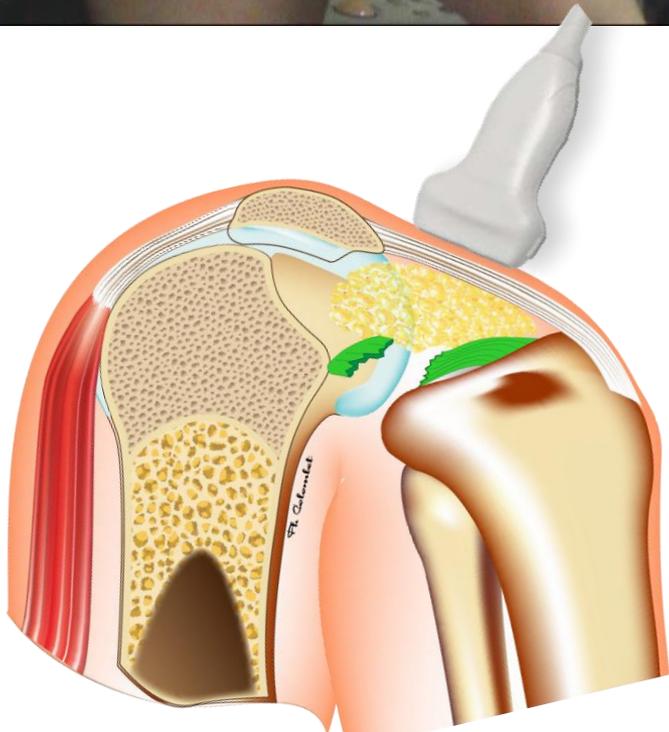


Meniscus Ramp lesion



Combined lesions.





Conclusion

- Dynamic HR ultrasound useful for meniscus pathology especially :
- Instability combined cases
- Follow up , postoperative conditions
- Monitoring healing /conservative treatment
- Repairability (vascularisation)
- Intervention (injection/ aspiration)