

EAU DANS LA TRAUMATOLOGIE NON VITALE

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CESU 06

Echoanatomie des membres

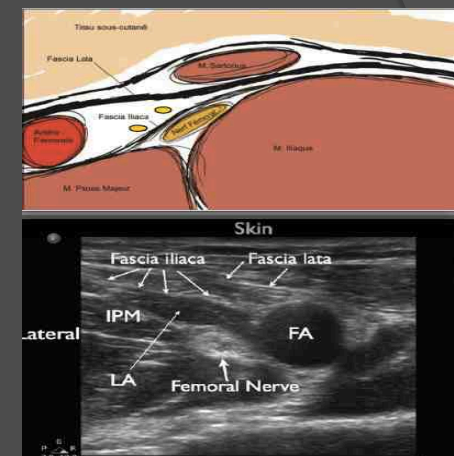
- Peau (épiderme, derme et hypoderme)
- Fascia
- Muscle et tendon, ligament
- Os et articulation
- Vaisseaux (artères et veines)
- Tissu lymphatique (ganglions)
- Nerf

Peau

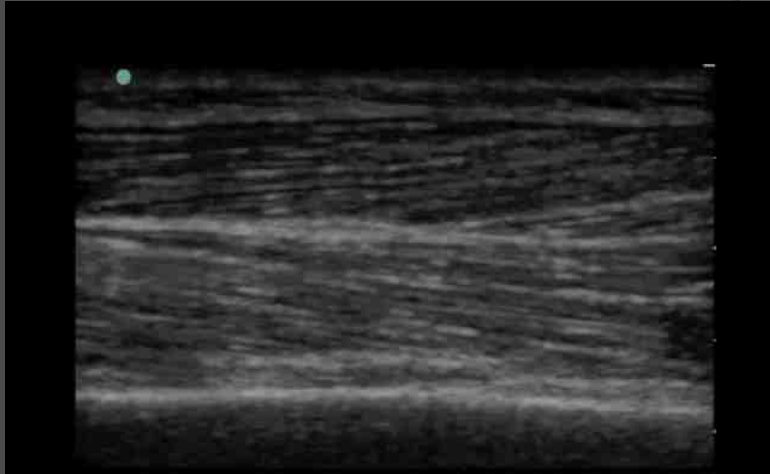


Fascia

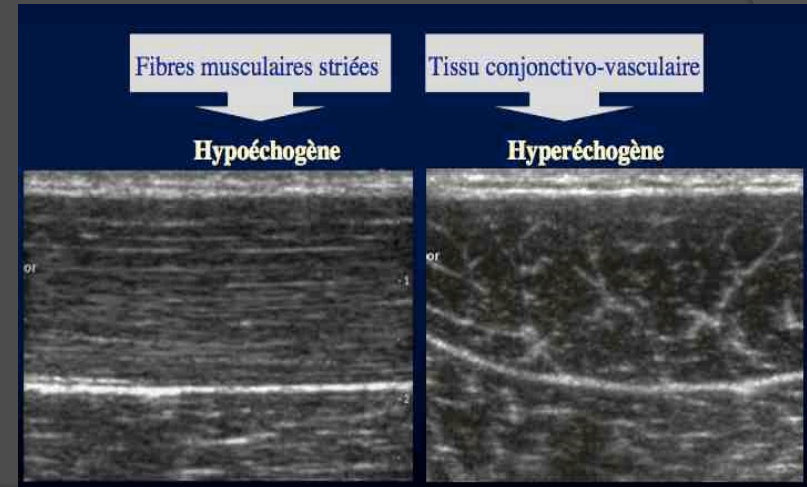
- Ligne hyperéchogène épaisse
- Epaisseur varie selon le site
- Important pour les fasciite et les ALR



Muscle



Muscle



Muscle

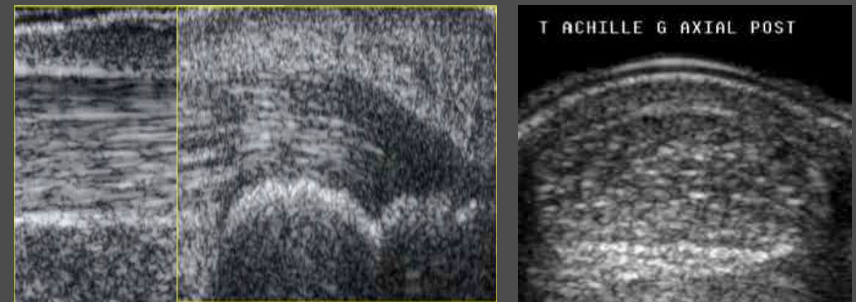
➤ Coupe longitudinale

✓ Au repos

✓ En contraction



Tendon



Longitudinal

transversal

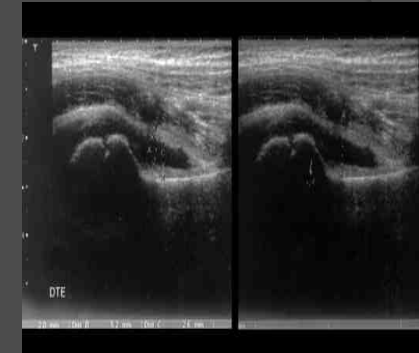
Ligament

- Entorse +++
- Mais nécessite beaucoup d'expérience, de matériel et de sonde spécifique
- Pas dans l'EAU



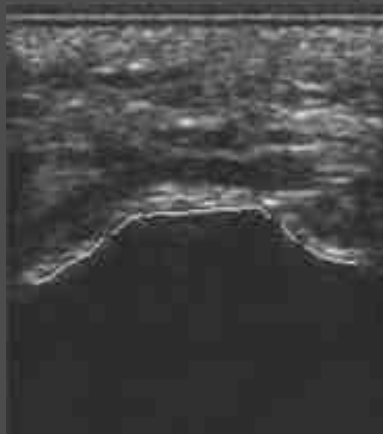
Articulation

- Echo d'expert mais pourrait être intéressant pour confirmer un épanchement articulaire
- Place dans l'EAU pour rhume de hanche



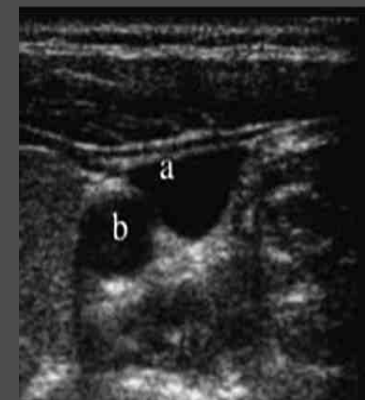
Os

- Corticale réfléchissant les US avec aspect hyperéchogène et cône d'ombre, (discrète pénétration basse fréquence)
- Périoste



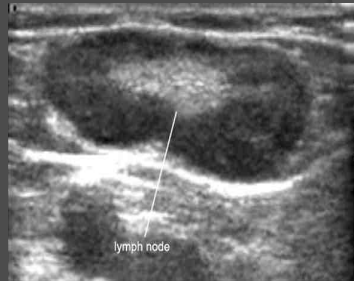
Vaisseaux

- Artère
 - Arrondie
 - Pulsatile
 - Paroi épaisse
 - Non compressible
- Veine
 - Ovalaire
 - Non pulsatile
 - Pas de paroi
 - Compressible



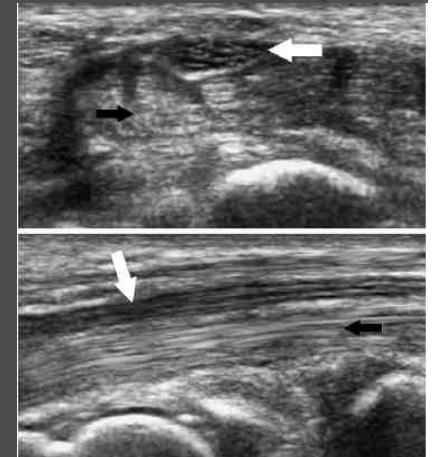
Ganglions

- Aspect
 - ovalaire, hypoéchogène avec hile hyperéchogène
 - Taille < 1 cm
 - Solide +++
- Si perd ses caractéristiques = pathologiques
- Echo d'expert +++



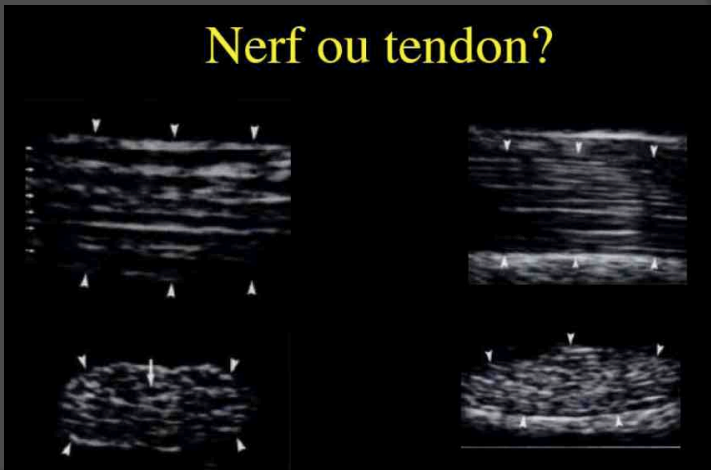
Nerf

- En transversale aspect en nid d'abeille et hypoéchogène
- En longitudinale aspect fasciculaire comme tendon et son aspect fibrillaire mais hypoéchogène
- Bien connaître l'anatomie et ses repères cliniques !!!



Nerf

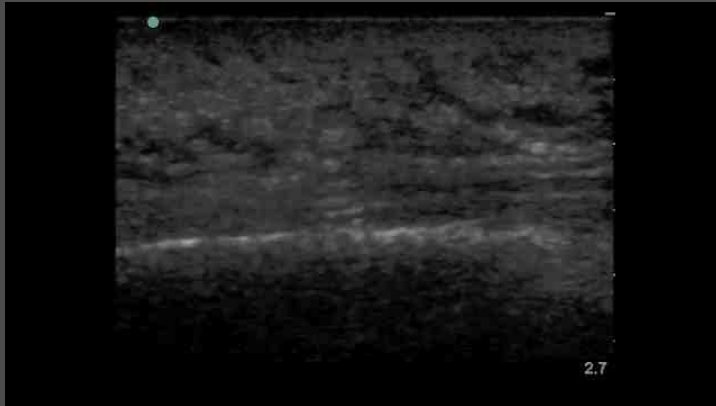
Nerf ou tendon?



Cellulite

- Cellulite: terme anglo-saxon impropre, doit être remplacé par DHB, DHBN ou Fasciite selon le siège de la lésion
- Diagnostic clinique, pas d'examen et TTT au domicile mais suivi
- Risque de TVP: 0,7 à 4,9%
- DHBN-FN: Dg clinique (bulles, taches de nécrose, crépitation neigeuse, sepsis sévère)

Cellulite



Cellulite

- Attention pas de différence échographique entre une infiltration œdémateuse des tissus sous cutanés et une DHB
- CONTEXTE CLINIQUE (RCOD) +++ !!!
- Intérêt écho = Abscès +++, pas encore prouvé pour la nécrose avec du gaz ??

Abcès

- Différencier cellulite et abcès (ATB vs Drainage et ATB), change la thérapeutique
- Collection anechogène ou hypoéchogène, avec débris, renforcement postérieur, cloison hyperéchogène, hypervascularisation, légèrement compressible

Abcès

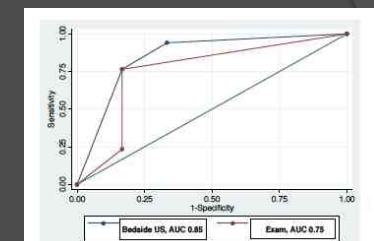
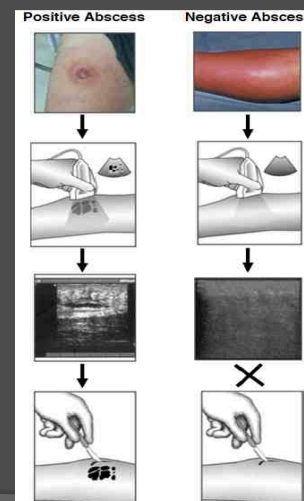


Fig. 2 Receiver operating curves and AUCs for the prediction of positive I&D.

TABLE 2. Diagnostic Accuracy of Clinical Examination

Sensitivity	86% (95% CI = 76%, 93%)
Specificity	70% (95% CI = 55%, 82%)
Positive predictive value	81% (95% CI = 70%, 90%)
Negative predictive value	77% (95% CI = 62%, 88%)

TABLE 3. Diagnostic Accuracy of Clinical Examination Plus Ultrasonography

Sensitivity	98% (95% CI = 93%, 100%)
Specificity	88% (95% CI = 76%, 96%)
Positive predictive value	93% (95% CI = 84%, 97%)
Negative predictive value	97% (95% CI = 88%, 100%)

Abcès

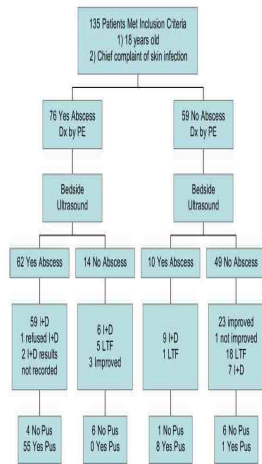


Figure 1. Patient flow diagram. PE = physical examination; I + D = incision and drainage; LTF = lost to follow-up.

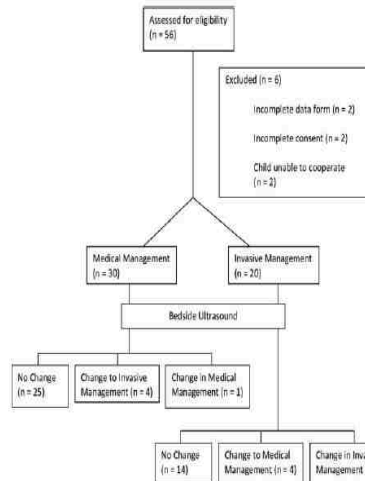


Figure 2. Patient flow.

Abcès



Abcès musculaire



Caption

Fig 3 Normal quadriceps muscle (left) and quadriceps intramuscular loculated abscess or pyomyositis (right).

Hématome (Frais!!)

- Structure liquidienne (Anéchogène ou hypoéchogène avec débris, sans paroi, sauf si enkysté, et avec renforcement postérieur)
- Diagnostic clinique mais quantification échographique +++
- Guide un éventuel drainage +++

Hématome



Corps étrangers

- Utile pour les CE radio transparents, pour les radio opaques ca évite la radio; permet de vérifier l'extraction en temps réel ou après l'extraction
- Risque d'infection, cause de litige+++
- Précise la profondeur, la direction, le trajet, le chemin le plus court
- Tous visible à l'écho !!!!
- attention petite taille

CE



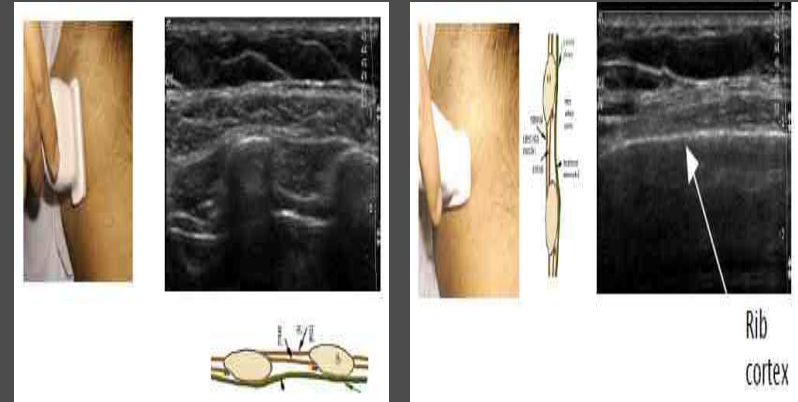
CE (astuces)



Fracture osseuse

- OS LONG +++ !!!
- Radio et US sont complémentaire +++
- Eviter radio inutile pour fracture de cote non déplacé. Parfois répond à un doute sur la radio
- Préhospitalier
- Post réduction +++

Fracture cote



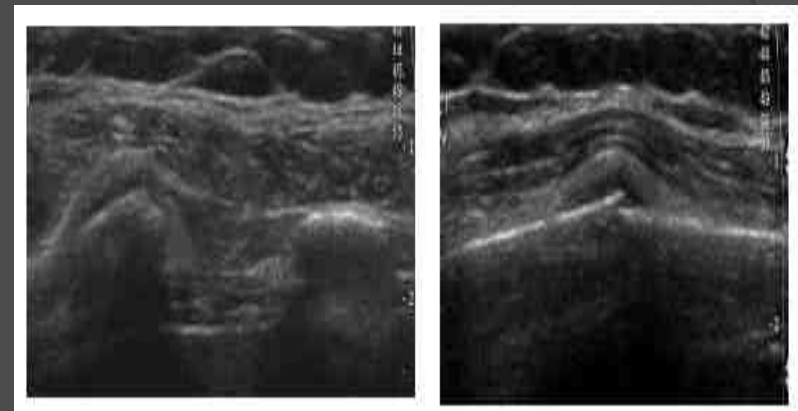
Fracture cote



Fig. 7: Rib fracture
Image 11 of 22

CLOSE X

Fracture cote



Fracture osseuse



Fracture occulte

Pediatr Emerg Care. 2011 Nov;27(11):1027-32. doi: 10.1097/PEC.0b013e318235e228.

Bedside ultrasound diagnosis of nonangulated distal forearm fractures in the pediatric emergency department.

Chaar-Alvarez FM, Warkentine F, Cross K, Herr S, Paul RI.

Palmer Children's Hospital, Orlando, FL, USA.

Abstract

OBJECTIVES: Ultrasound (US) may be a useful tool for rapidly diagnosing fractures. Our objective was to determine the accuracy of US as compared with radiographs in the detection of nonangulated distal forearm fractures.

METHODS: Distal forearm US was performed and interpreted at the bedside by a pediatric emergency medicine physician before radiography in a prospective sample of children with possible nonangulated distal forearm fractures. A second pediatric emergency medicine physician with extensive US experience gave a final interpretation of the images. This second reviewer was blinded to both clinical and radiographic findings. The primary outcome was accuracy in the detection of fracture via the blinded reviewer's US interpretation when compared with the radiologist's clinical radiography results. Patient-reported FACES pain scores (range, 0-5) associated with both US and radiography were compared.

RESULTS: Of 101 enrolled patients, 46 had a fracture detected by the radiologist. When compared with radiographs, the blinded US interpretation had an overall accuracy of 94% (95% confidence interval [CI], 88%-99%). Sensitivity and specificity were 96% (95% CI, 85%-99%) and 93% (95% CI, 82%-98%), respectively. Positive predictive value was 92%, and negative predictive value was 96%. Mean FACES pain scores were higher following radiography than US (1.7 vs 1.2, respectively; $P = 0.004$).

CONCLUSIONS: For the diagnosis of nonangulated distal forearm fractures in children, bedside US holds promise as a diagnostic modality, particularly with appropriate training. Ultrasound is at least no more painful than traditional radiographs. Pediatric emergency medicine physicians should consider becoming proficient in this application.

Fracture occulte

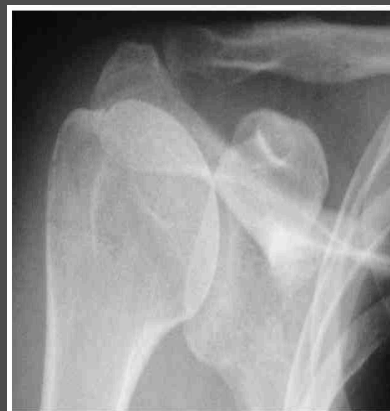


Fig. 8b: Ultrasound of fractured humerus. The fracture was initially missed on x-ray but was seen on US. Further radiographic images were required before the fracture could be identified.

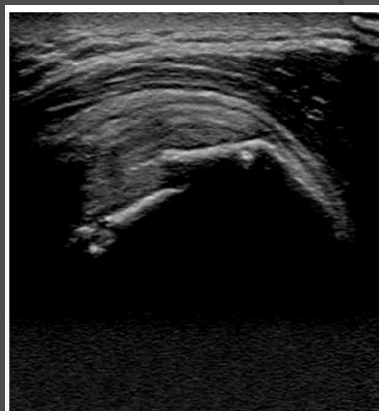
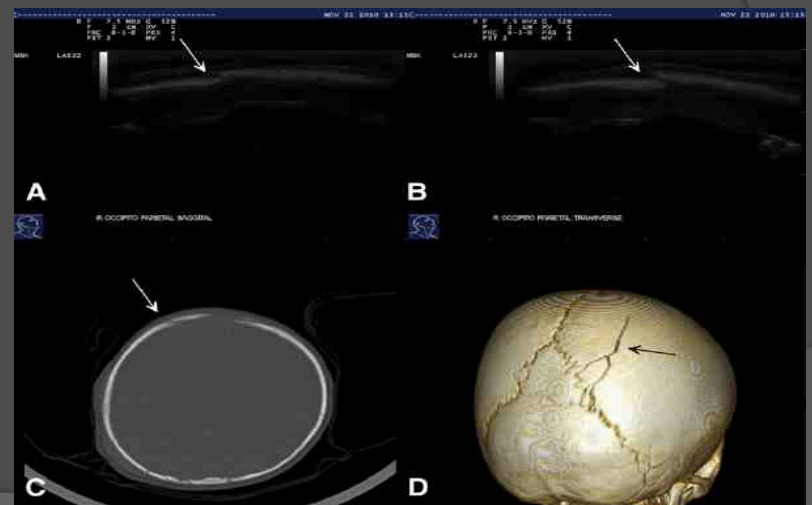


Fig. 8a: Ultrasound of fractured humerus. The fracture was initially missed on x-ray but was seen on US. Further radiographic images were required before the fracture could be identified.

Fracture crane enfant



Réduction des fractures

Am J Emerg Med. 2010 Nov;28(9):1002-8. doi: 10.1016/j.ajem.2009.05.022. Epub 2010 Mar 26.

Ultrasound-guided reduction of distal radius fractures.

Ang SH, Lee SW, Lam KY.

Department of Emergency Medicine, Changi General Hospital, Singapore. shiang_hu_ang@cgh.com.sg

Abstract

INTRODUCTION: In our local emergency departments (EDs), manipulation and reduction (M&R) of distal radius fractures are performed by emergency doctors, with blind manual palpation, using postreduction x-rays to assess adequacy. We sought to study the effectiveness of ultrasound guidance in the reduction of distal radius fractures in adult patients presenting to a regional ED.

METHODS: This was a before-and-after study. Eligible patients were adults older than 21 years who presented to the ED with distal radius fractures that required M&R. Sixty-two patients were prospectively enrolled from October 2007 until June 2008, and they underwent ultrasound-guided M&R. The control group was a retrospective cohort of 102 patients who presented from January to June 2007. They had M&R done using the blind manual palpation method. All M&R procedures were performed by doctors within the ED, and supervision was provided by senior emergency physicians. Ultrasound guidance was performed by the senior emergency physicians.

RESULTS: Baseline characteristics between the ultrasound and control groups were similar. The rate of repeat M&R was reduced in the ultrasound group (1.6% vs 8.8%; $P = .056$). The postreduction radiographic indices were similar between the 2 groups, although the ultrasound group had improved volar tilt (mean, 5.93° vs 2.61° ; $P = .048$). An incidental finding of a reduced operative rate was also found between the ultrasound and control groups (4.9% vs 16.7%; $P = .02$).

CONCLUSION: Ultrasound guidance is effective and recommended for routine use in the reduction of distal radius fractures.

Réduction de fractures

Am J Disaster Med. 2008 Jul-Aug;3(4):241-7.

Use of ultrasound to assess acute fracture reduction in emergency care settings.

McManus JG, Morton MJ, Crystal CS, McArthur TJ, Helphenstine JS, Masneri DA, Young SE, Miller MA.

U.S. Army Institute of Surgical Research, San Antonio, Texas, USA.

Abstract

OBJECTIVE: There is a need to develop tools for the rapid diagnosis and treatment of fractures and intraosseous pathology in remote and austere environments. Several emergency and orthopedic studies have demonstrated ultrasound to be a reliable tool in diagnosing these conditions in both adult and pediatric patients. The purpose of this pilot study is to assess the ability of the ultrasound to assess in "real-time" the success of fracture reduction in adult patients in the emergency department (ED), in comparison with the accepted standard, plain film radiography, for the purposes of future application in austere environments.

DESIGN: Case series.

SETTING: Emergency department at an academic medical center.

PATIENTS/PARTICIPANTS: Convenience sample of five patients presenting to an ED with clinical evidence of fractures (three radial, one phalangeal, and one metacarpal).

INTERVENTIONS: A Sonosite Titan portable ultrasound system with L38/10-5:38-mm broadband linear array transducer was used to assess prereduction and postreduction angulations and alignment. Alignment was reconfirmed with use of fluoroscopy and plain radiography.

RESULTS: The ultrasound confirmed proper reduction and realignment in all five cases, from an average prereduction angle of alignment of 37.4° degrees to an average postreduction angle of 4.4° degrees. The use of the ultrasound resulted in adequate visualization of the reduction in all cases. Regional anesthesia or sedation and limited pressure with the probe resulted in no verbalization of pain by any of the subjects.

CONCLUSIONS: In this pilot study, emergency physicians demonstrated the use of ultrasound in place of traditional radiography to either confirm adequate reduction or assess the need for further manipulation. Our pilot study suggests that ultrasound has a possible future role in fracture reduction management in both the ED as well as "austere" prehospital locations.

Luxation épaule

Ann Emerg Med. 2013 Mar 8; pii: S0196-0644(13)00094-2. doi: 10.1016/j.annemergmed.2013.01.022. [Epub ahead of print]

Diagnostic Accuracy of Ultrasonographic Examination in the Management of Shoulder Dislocation in the Emergency Department.

Abbasi S, Molaie H, Hafezimeghadam P, Zare MA, Abbasi M, Rezaei M, Farsi D.

Emergency Department, Tehran University of Medical Sciences, Tehran, Iran.

Abstract

STUDY OBJECTIVE: Emergency physicians frequently encounter shoulder dislocation in their practice. The objective of this study is to assess the diagnostic accuracy of ultrasonography in detecting shoulder dislocation and confirming proper reduction in patients presenting to the emergency department (ED) with possible shoulder dislocation. We hypothesize that ultrasonography could be a reliable alternative for pre- and postradiographic evaluation of shoulder dislocation.

METHODS: This was a prospective observational study. A convenience sample of patients suspected of having shoulder dislocation was enrolled in the study. Ultrasonography was performed before and after reduction procedure with a 7.5- to 10-MHz linear transducer. Shoulder dislocation was confirmed by taking radiographs in 3 routine views as a criterion standard. The operating characteristics of ultrasonography to detect dislocation in patients with possible shoulder dislocation and to confirm reduction in patients with definitive dislocation were calculated as the primary endpoints.

RESULTS: Seventy-three patients were enrolled. The ultrasonography did not miss any dislocation. The results of ultrasonography and radiography were identical and the sensitivity of ultrasonography in detection of shoulder dislocation was 100% (95% confidence interval 93.4% to 100%). The sensitivity of ultrasonography for assessment of complete reduction of the shoulder joint reached 100% (95% confidence interval 93.2% to 100%) in our study as well.

CONCLUSION: We suggest that ultrasonography be performed in all patients who present to the ED with a clinical impression of shoulder dislocation on admission time. The results of this study provide promising preliminary support for the ability of ultrasonography to detect shoulder dislocation. However, further investigation is necessary to validate the results and assess the ability of ultrasonography in detecting fractures associated with dislocation.

Luxation inhabituelle

J Emerg Med. 2013 Mar 12; pii: S0736-4679(12)01609-5. doi: 10.1016/j.jemermed.2012.11.080. [Epub ahead of print]

Point-of-Care Ultrasound Facilitates Diagnosing a Posterior Shoulder Dislocation.

Mackenzie DC, Liebmman Q.

Department of Emergency Medicine, Warren Alpert Medical School of Brown University, Providence, Rhode Island.

Abstract

BACKGROUND: Posterior shoulder dislocation is an uncommon disruption of the glenohumeral joint. Risk factors include seizure, electric shock, and underlying instabilities of the shoulder joint.

CASE REPORT: A 27-year-old man with a history of recurrent posterior shoulder dislocation presented to the Emergency Department with sudden shoulder pain and reduced range of motion about the shoulder after abducting and internally rotating his arm. Radiographs did not show fracture or dislocation. The treating physician suspected an occult posterior shoulder dislocation, but wanted to avoid performing a computed tomography scan of the shoulder, as the patient had undergone numerous scans during the evaluation of similar complaints. Instead, a point-of-care ultrasound was performed, demonstrating posterior displacement of the humeral head relative to the glenoid rim, confirming the presence of a posterior shoulder dislocation. The patient received procedural sedation, and the shoulder was reduced with real-time ultrasound visualization. The patient tolerated the procedure well, and had decreased pain and improved range of motion. He was discharged with a sling, swathe, and orthopedic follow-up.

CONCLUSION: Point-of-care ultrasound of the shoulder may be used to demonstrate posterior shoulder dislocation. This may have particular utility in the setting of non-diagnostic radiographs.

Emerg Med J. 2011 Jun;28(6):542. doi: 10.1136/emj.2010.093765. Epub 2010 Jun 26.

The use of bedside ultrasound to diagnose posterior sterno-clavicular dislocation.

Blakeley CJ, Harrison HL, Siow S, Hashemi K.

Emergency Department, Mayday Hospital, Croydon, UK. christopher.blakeley@mayday.nhs.uk

Vérification réduction

Ann J Emerg Med. 2009 Jan;27(1):134.e5-6. doi: 10.1016/j.ajem.2008.05.023.

Bedside ultrasound for verification of shoulder reduction.

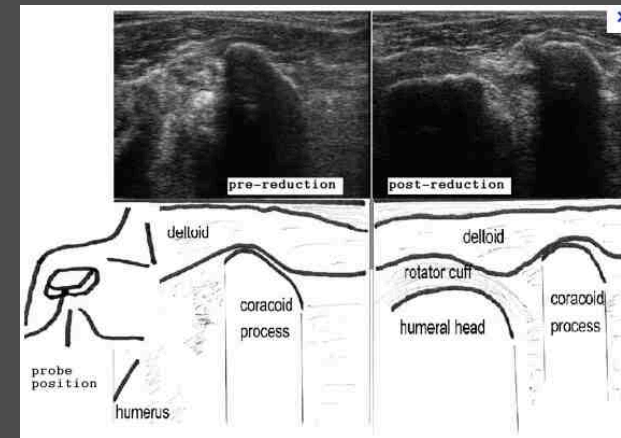
Halberg MJ, Sweeney TW, Owens WB.

Department of Emergency Medicine, Maine Medical Center, Portland, ME 04102, USA. mhalberg@gmail.com

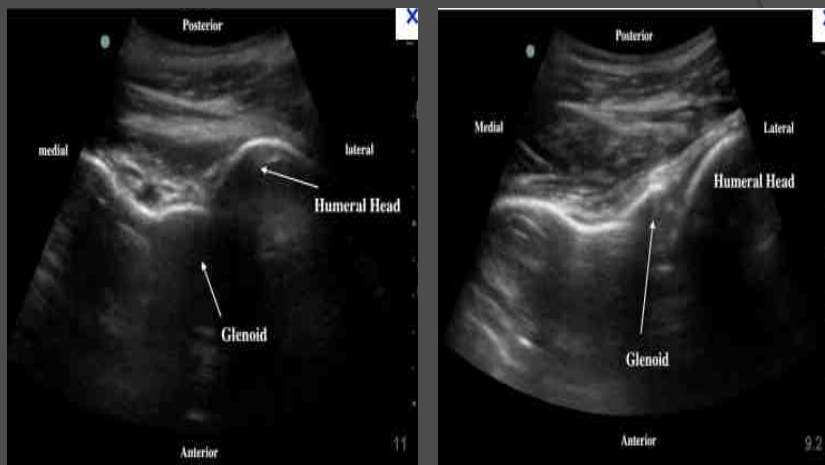
Abstract

Shoulder dislocations are a common complaint in the emergency department. The management of these injuries is well described and often involves procedural sedation. Unfortunately, patients often recover from this sedation before radiographs can verify successful reduction. We describe 2 patients with glenohumeral dislocations and subsequent reduction immediately verified by bedside ultrasound before the patients' recovery from procedural sedation. Our experience suggests that ultrasound may reduce the need for repeated sedation, expedite care, and reduce costs.

Luxation et réduction épaule



Luxation postérieur épaule



Rhume de hanche

Ann Emerg Med. 2010 Mar;55(3):284-9. doi: 10.1016/j.annemergmed.2009.06.527. Epub 2009 Aug 20.

Bedside ultrasonography to identify hip effusions in pediatric patients.

Vieira RL, Levy JA.

Division of Emergency Medicine, Department of Medicine, Children's Hospital Boston, Harvard Medical School, 300 Longwood Avenue, Boston, MA 02115, USA. rebecca.vieira@childrens.harvard.edu

Abstract

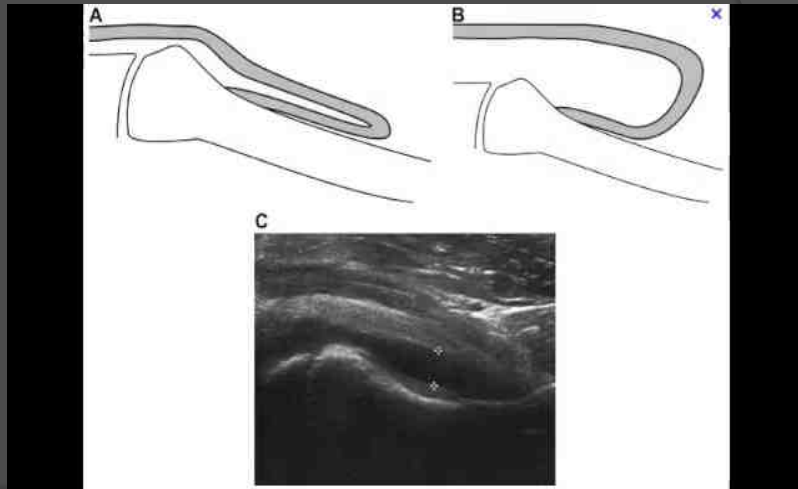
STUDY OBJECTIVE: We determine whether pediatric emergency physicians can use bedside ultrasonography to accurately identify hip effusions in pediatric patients.

METHODS: This was a prospective study conducted in the emergency department (ED) of an urban tertiary care freestanding pediatric hospital. A convenience sample of children younger than 18 years and who required hip ultrasonography as part of their ED evaluation was enrolled. Pediatric emergency physicians with focused ultrasonographic training performed bedside ultrasonography on patients' symptomatic and contralateral hips and categorized the findings as "effusion" or "no effusion," according to a priori definitions. Physicians rated their confidence for each bedside ultrasonographic result on a scale of 1 (not confident) to 5 (very confident). Bedside ultrasonographic results were compared with the radiology department's ultrasonographic results, which were considered the criterion standard. Standard performance metrics (sensitivity, specificity, and positive and negative predictive values) were calculated.

RESULTS: Three physicians enrolled patients. Twenty-eight patients were enrolled, and 55 hips were studied. In all hips (both symptomatic and contralateral), bedside ultrasonography had a sensitivity of 80% (95% confidence interval [CI] 51% to 95%), a specificity of 98% (95% CI 85% to 99%), a positive predictive value of 92% (95% CI 62% to 99%), and a negative predictive value of 93% (95% CI 79% to 98%). In the 28 symptomatic hips, bedside ultrasonography had a sensitivity of 85% (95% CI 54% to 97%), a specificity of 93% (95% CI 66% to 99%), a positive predictive value of 92% (95% CI 60% to 99%), and negative predictive value of 88% (95% CI 60% to 98%). When physician self-rated confidence was high, the sensitivity of bedside ultrasonography in symptomatic hips was 90% (95% CI 54% to 99%), the specificity was 100% (95% CI 70% to 100%), the positive predictive value was 100% (95% CI 63% to 100%), and the negative predictive value was 92% (95% CI 62% to 99%).

CONCLUSION: With focused training, pediatric emergency physicians were able to use bedside ultrasonography to identify hip effusions in pediatric ED patients.

Rhume de hanche



Epanchement intra articulaire

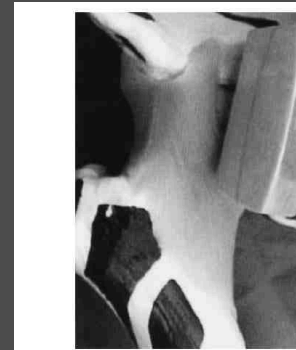


Figure 7. The anterior window of the hip in an oblique, sagittal plane. The transducer should be placed parallel to the long axis of the femoral neck.

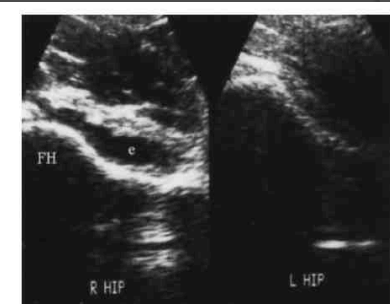


Figure 8. Bilateral hips with an effusion (e) present in the right hip adjacent to the femoral head (FH). The thick hyperechoic, band-like structure overlying the effusion is the joint capsule. This effusion extends along the entire length of the capsule.

Epanchement intra articulaire



Figure 9. Probe replacement for the anterior window of the knee. The patella is the bony landmark for imaging the suprapatellar bursa, which lies just deep to the quadriceps tendon.

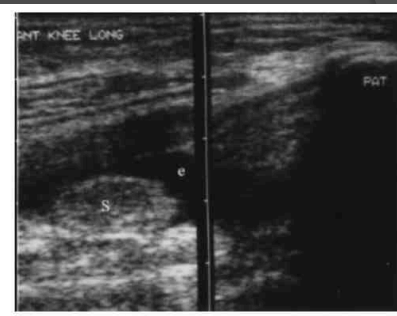


Figure 11. A longitudinal view of the anterior knee demonstrating an effusion (e) in the suprapatellar bursa with a synovial polyp (S). The patella (PAT) can be seen. This side-by-side view of montage extends the field of view. (Also see Figure 1).

Epanchement intra articulaire

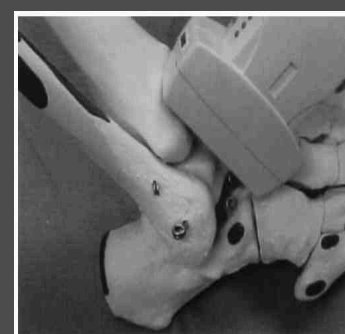


Figure 12. The anterior tibiotalar recess is approached in a longitudinal plane along the long axis of the tibia. The foot should be dorsiflexed.

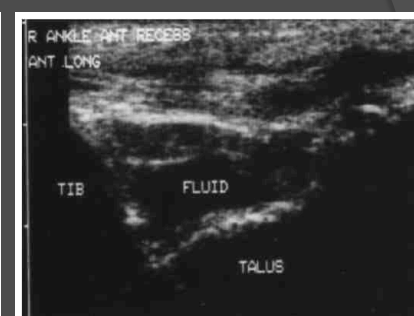


Figure 13. The anterior window of the ankle with the probe is longitudinal to the tibia (TIB) at the articulation of the talus and the tibia. Fluid is readily seen in the anterior tibiotalar recess.

Rappel sur le but de l'EAU

- Pertinence clinique et diagnostique
- Gain temps et meilleur prise en charge
- Facilité de réalisation et d'apprentissage
- Intérêt médico-économique

Autre lésion : Tendon ?

Am J Emerg Med. 2012 Oct;30(8):1617-21. doi: 10.1016/j.ajem.2011.11.004. Epub 2012 Jan 12.

Bedside ultrasound evaluation of tendon injuries.

Wu TS, Roque PJ, Green J, Drachman D, Khor KN, Rosenberg M, Simpson C.

Maricopa Medical Center, Department of Emergency Medicine, Phoenix, AZ 85008, USA.

Abstract

OBJECTIVE: The primary purpose of this study was to investigate the overall accuracy of bedside extremity tendon ultrasound performed by emergency physicians in the emergency department. We also sought to investigate whether or not bedside tendon ultrasonography can be used to expedite the diagnosis and discharge planning in patients with suspected tendon injuries.

METHODS: This was a prospective study conducted at 2 academic level 1 trauma centers. Thirty-four patients were enrolled and underwent a comprehensive physical examination of the injured extremity, followed by a bedside ultrasound evaluation to look for tendon disruption. Results of the tendon ultrasound were compared against the findings seen during wound exploration in the emergency department, wound exploration in the operating room, or results from an extremity magnetic resonance imaging (MRI).

RESULTS: There were 6 finger injuries, 11 hand injuries, 6 arm injuries, 6 forearm injuries, and 5 lower extremity injuries. Of the 34 total patients, 4 patients had partial tendon injuries, 9 suffered from 100% tendon laceration or rupture, and 21 had no tendon injury noted on exploration or MRI. Bedside ultrasound had a sensitivity, specificity, and accuracy of 100%, 95%, and 97%, respectively. Physical examination had a sensitivity, specificity, and accuracy of 100%, 76%, and 85%, respectively. Average time to bedside ultrasound was 46.3 minutes compared with 138.6 minutes for wound irrigation and exploration, MRI, or surgery consultation.

CONCLUSION: Bedside ultrasound is more sensitive and specific than physical examination for detecting tendon lacerations, and takes less time to perform than traditional wound exploration techniques or MRI.

Autre lésion : Tendon ?

J Emerg Med. 2008 Oct;35(3):293-5. Epub 2007 Sep 17.

Ultrasound diagnosis of quadriceps tendon rupture.

LaRocco BG, Zlupko G, Sierzenski P.

Department of Emergency Medicine, Christians Care Health Services, Newark, Delaware, USA.

Abstract

Quadriceps tendon ruptures are an uncommon knee injury. The diagnosis is often complicated by a limited examination secondary to edema and pain, the insensitivity of radiographs, and the unavailability of non-emergent magnetic resonance imaging. A delay in diagnosis and treatment has been shown to cause significant morbidity. A case report of bilateral quadriceps tendon rupture is presented demonstrating the utility and ease of bedside ultrasound to rapidly confirm the diagnosis.

BMJ Case Rep. 2013 Feb 7;2013. pii: bcr2012008189. doi: 10.1136/bcr-2012-008189.

Patellar tendon rupture: an ultrasound case report.

Berg K, Peck J, Boulger C, Bahner DP.

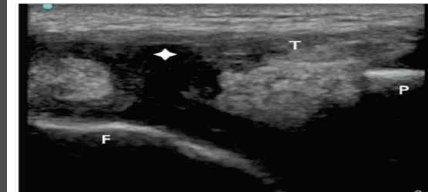
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Abstract

This article discusses a case in which ultrasound was the primary modality for diagnosis of traumatic patellar tendon rupture. Traditionally, this diagnosis has been made using MRI. This case highlights the growing need for emergency medicine physicians to become facile with bedside ultrasound and its indications as a supplement to traditional musculoskeletal examination. Normal and pathological patellar tendon examinations with ultrasound are discussed in detail. Furthermore, the advantages of ultrasound over the more traditional imaging modalities of x-ray and MRI in cases where tendon rupture is suspected are discussed.

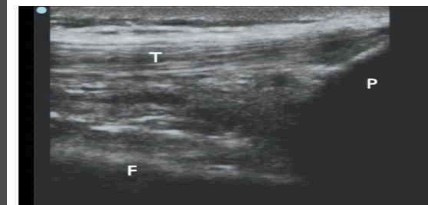
Autre lésion : Tendon ?

Figure 1



A sagittal image of the affected left knee demonstrates the ruptured quadriceps tendon (T) attached to the superior pole of the patella (P). Note the loss of linear fibers of the tendon, which is filled in by an effusion (*) anterior to the distal femur (F).

Figure 2



A sagittal image of the unaffected (normal) right knee clearly demonstrates the linear fibers of the quadriceps tendon (T) attached to the superior pole of the patella (P) and anterior to the distal femur (F).

Autre lésion : Tendon ?

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Point-of-care ultrasound diagnosis of acute Achilles tendon rupture in the ED.

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Abstract

Patients with acute Achilles tendon injuries from sport related activities are frequently seen in the emergency department (ED). Missed or delayed diagnosis of an Achilles tendon rupture can result in significant patient morbidity. However, the diagnosis of an Achilles tendon rupture is not always clear clinically. Physical examination maneuvers to assess for a tendon injury can be limited by pain and soft tissue swelling. Ultrasound has been shown to be very sensitive in detecting an Achilles tendon rupture. We report a case of a 39-year-old woman who presented to the ED with severe left ankle and leg pain. Her physical examination was limited by pain. However, a point-of-care ultrasound examination helped in making a prompt and accurate diagnosis of acute Achilles tendon rupture. This case demonstrates that point-of-care ultrasound can be a useful diagnostic tool in the assessment of patients with suspected Achilles tendon rupture, particularly when the physical examination is limited.

J Emerg Med. 2011 Apr;40(4):436-8. doi: 10.1016/j.jemermed.2008.03.047. Epub 2009 Feb 6.

Ultrasound diagnosis of traumatic partial triceps tendon tear in the emergency department.

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EAU Tendon

- Clinique le plus souvent suffisante, perte de temps, expérience et sonde de plus haute fréquence nécessaire
- À réserver à des cas particuliers et dans des mains expertes
- Attente d'étude sur la pertinence et non la faisabilité

Autre lésion : Ligaments

- Aucune étude
- Quels ligaments ??
- Est ce que modification thérapeutique ?
- Critère d'urgence ?
- Consommateur temps

Autre lésion : Calcification ?

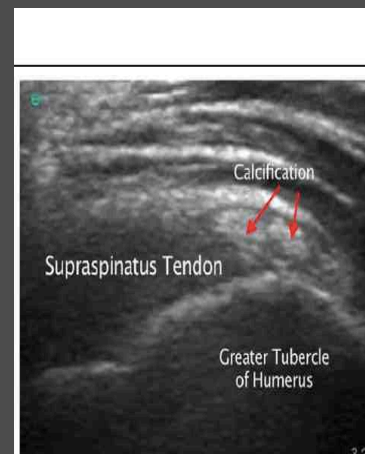


Figure 1 Supraspinatus tendon calcification.



Figure 3 Plain film radiograph of the proximal humerus with supraspinatus tendon calcification.