

## **DIAGNOSTIC TEST**

### **Objective**

To learn how to critically appraise the validity and results of a paper on diagnosis and apply those results to your clinical practice

### **Assignment**

1. Read the clinical scenario given below and formulate your clinical question.
2. read the article to determine if this is likely to provide the answer to your question and critically appraise the paper
3. Determine whether you can apply the results of the paper in your practice

### **Clinical Scenario**

You are a busy trauma surgeon at a tertiary referral trauma center. You have just received a call from Criticall and are expecting the arrival of a 32 year old man involved in an MVA. From the EMS report over the phone the patient is hypotensive and his list of obvious injuries include a humerus fracture and some degree of head injury (GCS 11) and

You are discussing the role of each trauma team member with them when your resident notices that the ultrasound machine is not in the trauma suite and wants to make a call to the radiology department as a paper he has just read reveals that the majority of those who have a positive FAST (focused abdominal sonography for trauma) study could go directly to exploratory laparotomy. Another trauma team member asks if it may not be quicker to just get a CT examination. You tell them that you want to discuss the ways of detecting free fluid in the abdomen later and after the trauma decide to review the following paper for its inclusion in the discussion.

### **Relevant Materials**

1. Furukawa TA, Straus SE, Bucher H, Agoritsas T, Guyatt G. Chapter 18 Diagnostic Tests. In: Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice, 3<sup>rd</sup> Edition. New York, NY: McGraw-Hill; 2015.
2. Bhandari M, Montori VM, Swiontkowski MF, Guyatt GH: User's guide to the surgical literature: how to use an article about a diagnostic test. *The Journal of bone and joint surgery* 2003, **85-A**(6):1133-1140.
3. Scales CD, Jr., Dahm P, Sultan S, Campbell-Scherer D, Devereaux PJ: How to use an article about a diagnostic test. *The Journal of urology* 2008, **180**(2):469-476.
4. Lee BC, Ormsby, EL, McGahan, JP, Melendres GM and Richards JR. The Utility of Sonography for the Triage of Blunt Abdominal Trauma Patinents to Exploratory Laparotomy. *AJR Am J Roentgenol.* 2007 Feb;**188**(2):415-21.