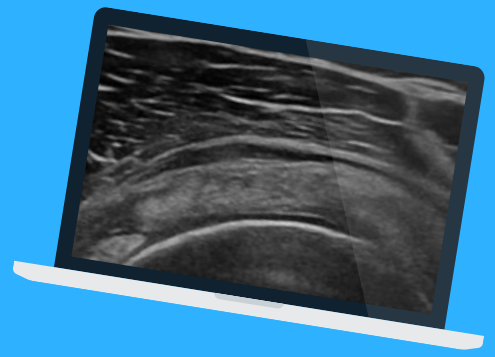


# THE SUBACROMIAL BURSA & ULTRASOUND IMAGING



A summary by Dave Baker & The Ultrasound Site team

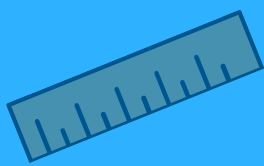


## RELEVANCE?

Size and presence of fluid within the subacromial bursa is often identified on ultrasound imaging- but is it clinically relevant? There is no universally agreed definition of 'bursitis' on ultrasound - It is a subjective judgement / evaluation by the reporting clinician

## WHAT IS NORMAL?

Within the literature the generally accepted 'normal' appearance is as a thin uniform 0-2mm hypoechoic layer of fluid or synovium surrounded by hyperechoic bursal wall and peribursal fat layer (2).



## DISTENSION?

Some fluid distension reported in 5-85% of cases, mean 0.5mm (range 0.1-2.7mm). Patients are rarely asymptomatic if bursa measure >3mm (5,6,2),

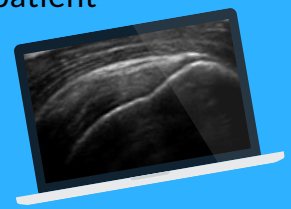
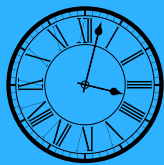
## DISTENDED IF SYMPTOMATIC?

Patients may have on average greater bursal distension on symptomatic versus asymptomatic (2)



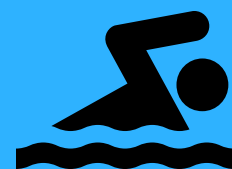
## AGE?

Changes to the tendon and bursa seen on ultrasound increase greatly with age and become common within the older population (50 years old and above) . Also the proportion of asymptomatic shoulders with significant sonographic changes increases greatly in the older patient population (10,11,12,13)



## DOES ACTIVITY CHANGE THE BURSA?

Thickness may vary with both acute and chronic changes in relation to activity levels (4)

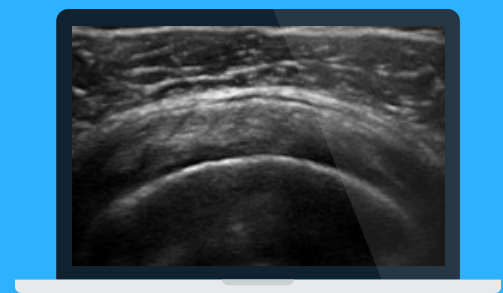


## DOES THE LOCATION OF FLUID MATTER?

Factors such as exact location of fluid might be relevant to whether patients experience pain e.g. lateral to ACJ and posterior to humerus (9)

## SUBCORACOID BURSA

Fluid in subcoracoid bursa is strongly correlated with pain and rotator cuff pathology (7,8)



## DYNAMIC TEST USEFUL?

There is lack of evidence to support the validity of dynamic tests such as 'bursal bunching' on abduction (3)

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