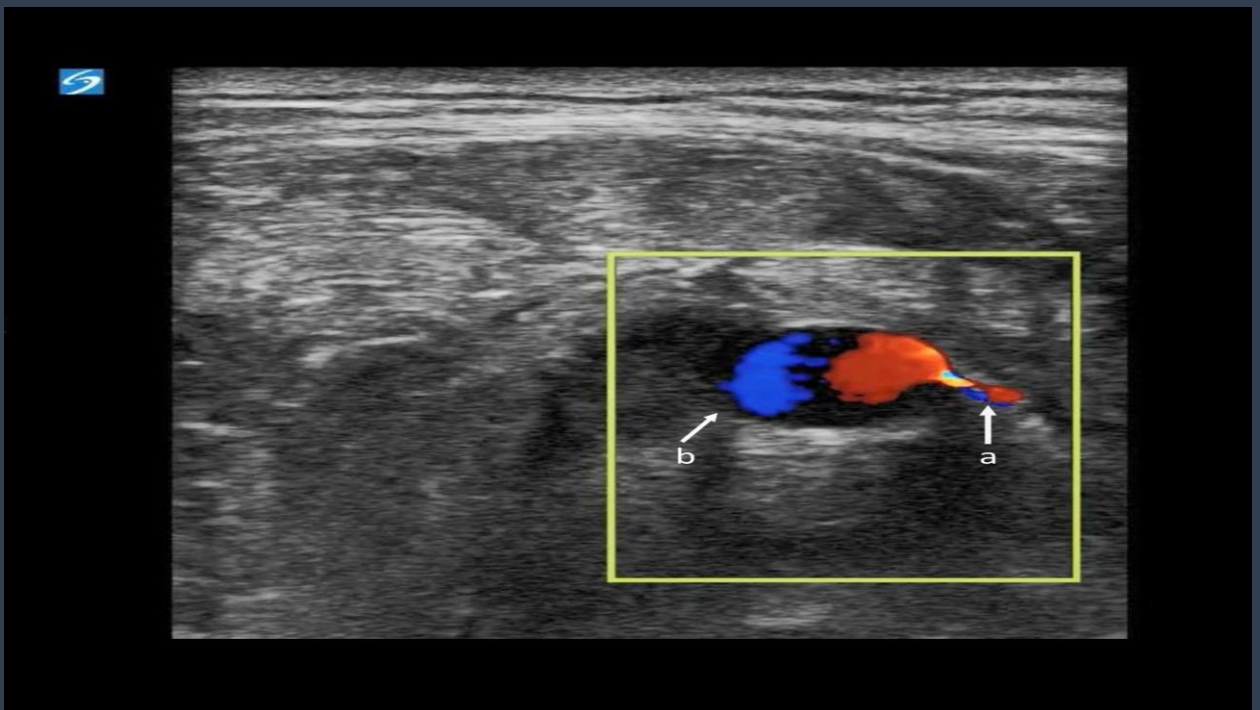


## Introduction:

A 49 year old patient presented with worsening pain and swelling in his right shoulder and arm two days following an assault to his face and right shoulder. He had a shoulder X-ray showing no signs of fracture. Point of Care Ultrasound (PoCUS) was performed to assess for a joint effusion but revealed slightly more.

## Main Body:

PoCUS showed a hypoechoic collection below the deltoid muscle with a 77mm round pulsating collection. This demonstrated the '*ying-yang sign*' on assessment with colour doppler (b) and was found to be arising from one of the branches of the thoraco-acromial artery (a). This significantly altered the management of the patient in prompting a CT angiogram that confirmed a leaking pseudoaneurysm in the right shoulder with surrounding hematoma. The patient was admitted for an ultrasound guided thrombin injection which was successful.



## Discussion:

- Traumatic pseudoaneurysms of branches of thoracoabdominal artery are very rare.
- Ultrasound has been used to evaluate soft tissue swellings and pseudoaneurysms in post-traumatic injuries and intravenous drug users.
- Pseudoaneurysms appear as round pulsating swellings arising from a vessel. Colour doppler shows the pathognomic '*ying-yang*' or '*pepsi*' sign which is due to turbulent flow of blood within the pseudoaneurysm.

## Conclusion:

This case highlights the utility of PoCUS in the evaluation of traumatic soft tissue swellings and its ability to direct diagnostics and expedite appropriate patient management.