

## Advanced Case in Point Example

<https://cortex.acr.org/Presenters/CaseScript/CaseView?Info=SgKZ%2fgWAeLZ1sysCEKa91PPYc9j%2bSyJX5yjBEiV54fWXzwe3SqiyBQaa%2bQB%2fird>

### Page 1 – Scenario and Question

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#### Scenario [Edit](#)

A 26-year-old woman presents with acute shoulder pain and decreased range of motion after a bicycle accident.

[AC Portal](#)

#### Question [Edit](#)

1.1 Which of the following is the most appropriate imaging option for this patient?

- A CT shoulder without IV contrast
- B MR arthrography shoulder
- C Shoulder x-ray
- D US shoulder

[Edit Arbitrary Text](#)

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### Page 1 – Explanation

### Scenario

A 26-year-old woman presents with acute shoulder pain and decreased range of motion after a bicycle accident.

Appropriateness rankings for a 26 year old Female			Display Evidence...	
Indications: <input type="text" value="Shoulder pain, no prior imaging"/>				
Appropriateness	Procedure	Cost	RRL	
9	Radiography shoulder	\$	☠	
1	CT arthrography shoulder	\$\$	☠☠☠☠	
1	CT shoulder with IV contrast	\$\$\$	☠☠☠	
1	CT shoulder without IV contrast	\$\$	☠☠☠	
1	CT shoulder without and with IV contrast	\$\$\$	☠☠☠	
1	X-ray arthrography shoulder		☠	

### Question

1.1 Which of the following is the most appropriate imaging option for this patient?

You Selected C:  
Shoulder x-ray

### Explanation

- ✓ Correct. For traumatic shoulder pain of any etiology, the initial imaging should be an x-ray of the shoulder. Under the Quebec decision rule, patients under 40 are at increased risk for clinically significant fractures or dislocations only if the injury involves high energy mechanism, such as a fall from greater than the patient's height, motor vehicle collision, or physical assault. In these cases, an x-ray can assess for dislocations and fractures.

For further information, click on the "Display Evidence" tab within the clinical decision support panel. There is a summary of literature review under the tables.

Estimated cost ranges based on Centers for Medicare and Medicaid (CMS) data.

\$:	from <input type="text" value="0.00"/>	up to <input type="text" value="100.00"/>
\$\$:	from <input type="text" value="100.00"/>	up to <input type="text" value="250.00"/>
\$\$\$:	from <input type="text" value="250.00"/>	up to <input type="text" value="500.00"/>
\$\$\$\$:	from <input type="text" value="500.00"/>	up to <input type="text" value="10000.00"/>

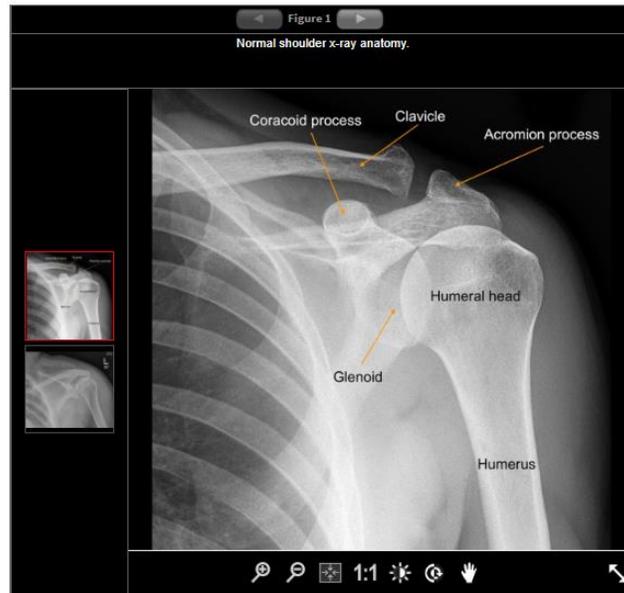
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## Interested in an advanced case on this topic with additional images?

The following Case in Point case provides additional information on this topic: [Posterior shoulder dislocation with accompanying reverse Hill-Sachs fracture](#)

ACR Case in Point (CIP) provides access to the Case in Point archives to medical students. For the most recent cases with the newest topics, ACR provides free medical student membership. More information can be found at [Medical Student Membership](#)

Additional Resource: [22 Don't Miss X-ray Lesions - Shoulder Dislocation pg 44-46](#)



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## Page 3 – Author and References

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### References

1. Pavic, R., Margetic, P., Bencic, M. & Brnadic, R. L. Diagnostic value of US, MR and MR arthrography in shoulder instability. *Injury* 44 Suppl 3, S26-32 (2013).
2. Emond, M., Le Sage, N., Lavoie, A. & Moore, L. Refinement of the Quebec decision rule for radiography in shoulder dislocation. *CJEM* 11, 36-43 (2009).
3. Rutten, M. J. C. M., Collins, J. M. P., de Waal Malefijt, M. C., Kiemeneij, L. A. L. M. & Jager, G. J. Unsuspected sonographic findings in patients with posttraumatic shoulder complaints. *J Clin Ultrasound* 38, 457-465 (2010).