American College of Radiology  
ACR Appropriateness Criteria®

Acute Pelvic Pain in the Reproductive Age Group

Variant 1:  Gynecological etiology suspected, serum β-hCG positive.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>US pelvis transabdominal</td>
<td>Usually appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv</td>
<td>9</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>US pelvis transvaginal</td>
<td>Usually appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv</td>
<td>9</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>US duplex Doppler adnexa</td>
<td>Usually appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv</td>
<td>8</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRI abdomen and pelvis without IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv</td>
<td>6</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRI pelvis without IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv</td>
<td>6</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>1-10 mSv</td>
<td>3-10 mSv</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT abdomen and pelvis without and with IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>10-30 mSv</td>
<td>10-30 mSv</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT abdomen and pelvis without IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>1-10 mSv</td>
<td>3-10 mSv</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT pelvis with IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>1-10 mSv</td>
<td>3-10 mSv</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Procedure</td>
<td>Appropriateness Category</td>
<td>SOE</td>
<td>Adults RRL</td>
<td>Peds RRL</td>
<td>Rating</td>
<td>Median</td>
<td>Final Tabulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------</td>
<td>------</td>
<td>----------------</td>
<td>--------------</td>
<td>--------</td>
<td>--------</td>
<td>------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US pelvis transabdominal</td>
<td>Usually appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US pelvis transvaginal</td>
<td>Usually appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US duplex Doppler pelvis</td>
<td>Usually appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI abdomen and pelvis without and with IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>6</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI pelvis without and with IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>6</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>☢☢☢ 1-10 mSv</td>
<td>☢☢☢ 3-10 mSv [ped]</td>
<td>4</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT pelvis with IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>☢☢☢ 1-10 mSv</td>
<td>☢☢☢ 3-10 mSv [ped]</td>
<td>4</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Variant 2:  Gynecological etiology suspected, serum ß-hCG negative.
### MRI abdomen and pelvis without IV contrast
- May be appropriate
- SOE: 0 mSv
- Peds RRL: 0 mSv
- Rating: 4
- Median: n/a
- Final Tabulations:
  - 1: 0
  - 2: 0
  - 3: 0
  - 4: 0
  - 5: 0
  - 6: 0
  - 7: 0
  - 8: 0
  - 9: 0

### MRI pelvis without IV contrast
- May be appropriate
- SOE: 0 mSv
- Peds RRL: 0 mSv
- Rating: 4
- Median: n/a
- Final Tabulations:
  - 1: 0
  - 2: 0
  - 3: 0
  - 4: 0
  - 5: 0
  - 6: 0
  - 7: 0
  - 8: 0
  - 9: 0

### CT abdomen and pelvis without and with IV contrast
- Usually not appropriate
- SOE: 10-30 mSv
- Peds RRL: 10-30 mSv
- Rating: 2
- Median: n/a
- Final Tabulations:
  - 1: 0
  - 2: 0
  - 3: 0
  - 4: 0
  - 5: 0
  - 6: 0
  - 7: 0
  - 8: 0
  - 9: 0

### CT abdomen and pelvis without IV contrast
- Usually not appropriate
- SOE: 1-10 mSv
- Peds RRL: 3-10 mSv
- Rating: 2
- Median: n/a
- Final Tabulations:
  - 1: 0
  - 2: 0
  - 3: 0
  - 4: 0
  - 5: 0
  - 6: 0
  - 7: 0
  - 8: 0
  - 9: 0

### CT pelvis without and with IV contrast
- Usually not appropriate
- SOE: 10-30 mSv
- Peds RRL: 3-10 mSv
- Rating: 2
- Median: n/a
- Final Tabulations:
  - 1: 0
  - 2: 0
  - 3: 0
  - 4: 0
  - 5: 0
  - 6: 0
  - 7: 0
  - 8: 0
  - 9: 0

### CT pelvis without IV contrast
- Usually not appropriate
- SOE: 1-10 mSv
- Peds RRL: 3-10 mSv
- Rating: 2
- Median: n/a
- Final Tabulations:
  - 1: 0
  - 2: 0
  - 3: 0
  - 4: 0
  - 5: 0
  - 6: 0
  - 7: 0
  - 8: 0
  - 9: 0

### Variant 3: Nongynecological etiology suspected, serum β-hCG positive.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>US pelvis transvaginal</td>
<td>Usually appropriate</td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>US abdomen and pelvis transabdominal</td>
<td>Usually appropriate</td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>MRI abdomen and pelvis without IV contrast</td>
<td>Usually appropriate</td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>8</td>
<td>n/a</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>US duplex Doppler adnexa</td>
<td>Usually appropriate</td>
<td>O 0 mSv</td>
<td>O 0 mSv [ped]</td>
<td>8</td>
<td>n/a</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>May be appropriate</td>
<td>1-10 mSv</td>
<td>3-10 mSv [ped]</td>
<td>4</td>
<td>n/a</td>
<td>0</td>
<td>0 0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Procedure</td>
<td>Appropriateness Category</td>
<td>SOE</td>
<td>Adults RRL</td>
<td>Peds RRL</td>
<td>Rating</td>
<td>Median</td>
<td>Final Tabulations</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>--------------------------</td>
<td>-----</td>
<td>---------------------</td>
<td>---------------------------</td>
<td>--------</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>CT abdomen and pelvis without IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>⚠️⚠️️ 1-10 mSv</td>
<td>⚠️⚠️⚠️️ 3-10 mSv [ped]</td>
<td>3</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>MRI abdomen and pelvis without and with IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>2</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>CT abdomen and pelvis without and with IV contrast</td>
<td>Usually not appropriate</td>
<td></td>
<td>⚠️⚠️⚠️ 10-30 mSv</td>
<td>⚠️⚠️⚠️⚠️ 10-30 mSv [ped]</td>
<td>1</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

**Variant 4:** Nongynecological etiology suspected, serum β-hCG negative.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Appropriateness Category</th>
<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
<th>Final Tabulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT abdomen and pelvis with IV contrast</td>
<td>Usually appropriate</td>
<td></td>
<td>⚠️⚠️ 1-10 mSv</td>
<td>⚠️⚠️⚠️️ 3-10 mSv [ped]</td>
<td>9</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>US abdomen and pelvis transabdominal</td>
<td>Usually appropriate</td>
<td></td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>7</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>US duplex Doppler pelvis</td>
<td>Usually appropriate</td>
<td></td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>7</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>CT abdomen and pelvis without IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>⚠️⚠️ 1-10 mSv</td>
<td>⚠️⚠️⚠️️ 3-10 mSv [ped]</td>
<td>6</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>MRI abdomen and pelvis without and with IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>6</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>MRI abdomen and pelvis without IV contrast</td>
<td>May be appropriate</td>
<td></td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>4</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>US pelvis transvaginal</td>
<td>May be appropriate</td>
<td></td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>4</td>
<td>n/a</td>
<td>0 0 0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>CT abdomen and pelvis without and with IV contrast</td>
<td>Usually not appropriate</td>
<td>✅✅✅✅ 10-30 mSv</td>
<td>✅✅✅✅ 10-30 mSv [ped]</td>
<td>2</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

☢☢☢☢ 10-30 mSv
☢☢☢☢☢ 10-30 mSv [ped]
Appendix Key
A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

**Appropriateness Category:** The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

**SOE:** Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- **References:** The citation number and PMID for the reference(s) associated with the recommendation.
- **Study Quality:** The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

**RRL:** Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

**Rating:** The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Median:** The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

**Final tabulations:** A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at [www.acr.org/ac](http://www.acr.org/ac).