

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

Literature Search Performed on: 08/01/2024

Beginning Date: January 2013

End Date: July 2024

Database: Ovid MEDLINE(R) ALL <1946 to July 30, 2024>

**Search Strategy**

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- 1 (Wounds/ and Injuries/) or Pain/ or Upper Abdomen/ or Spleen injuries/ or Abdominal Pain/ or (left upper quadrant or abdom\* or trauma\* or spleen injur\*).ti,ab,kw. or splenic injur\*.mp. (1083679)
- 2 (sport\* or athlet\* or Exercis\* or physical\*).ti,ab,kw. or Sports/ or Athletic Injuries/ or Sports Medicine/ or Exercise/ (1422415)
- 3 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Fluoroscopy/ (985756)
- 4 (imag\* or radio\* or CT scan\* or ultraso\* or enterograph\* or Fluoroscop\*).ti,ab,kw. (3053907)
- 5 Diagnostic Errors/ or (Sensitivity/ and Specificity/) or Adverse Effects/ (412322)
- 6 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or (Adverse Effect\* or effic\* or accura\* or identifi\* or adverse effects or sensitiv\* or specific\* or diagnos\* or diagnos\* or Error\* or predictive valu\*).ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positiv\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.tw. or diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ (11910943)
- 7 1 and 2 and (3 or 4) and (5 or 6) (8234)
- 8 limit 7 to (abstracts and english language and humans and yr="2013 -Current") (3001)
- 9 limit 8 to "all child (0 to 18 years)" (829)
- 10 8 not 9 (2172)
- 11 limit 10 to case reports (449)
- 12 10 not 11 (1723)
- 13 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (416049)
- 14 13 and 2 and (3 or 4) (2040)
- 15 (Wounds/ and Injuries/) or Pain/ or Upper Abdomen/ or Spleen injuries/ or Abdominal Pain/ or (left upper quadrant or abdom\* or trauma\* or spleen injur\*).ti,ab,kw. or splenic injur\*.mp. (1083679)
- 16 Accidents/ or Traffic/ or Accidental Falls/ or Violence/ or motor vehicle collision\*.ti,ab,kw. or fall\*.ti,ab,kw. or assault\*.ti,ab,kw. (338974)
- 17 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Fluoroscopy/ or Computed Tomography Angiography/ (999345)
- 18 (imag\* or radio\* or CT scan\* or ultraso\* or enterograph\* or Fluoroscop\* or CT angiogra\* or heat damaged RBC or sulfur colloid scan).ti,ab,kw. (3060066)
- 19 Diagnostic Errors/ or (Sensitivity/ and Specificity/) or Adverse Effects/ (412322)
- 20 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or (Adverse Effect\* or effic\* or accura\* or identifi\* or adverse effects or sensitiv\* or specific\* or diagnos\* or diagnos\* or Error\* or predictive valu\*).ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positiv\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.tw. or diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ (11910943)
- 21 15 and 16 and (17 or 18) and (19 or 20) (2388)
- 22 limit 21 to (abstracts and english language and humans and yr="2013 -Current") (929)
- 23 limit 22 to "all child (0 to 18 years)" (289)
- 24 22 not 23 (640)
- 25 limit 24 to case reports (193)
- 26 24 not 25 (447)
- 27 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (416049)
- 28 27 and 16 and (17 or 18) (388)
- 29 28 not 14 (337)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

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Literature Search Performed on: 07/31/2024

Beginning Date: January 2013

End Date: June 2024

Database: Ovid MEDLINE(R) ALL <1946 to July 30, 2024>

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**Search Strategy**

- 1 (Wounds/ and Injuries/) or Assault/ or Flank Pain/ or Hematuria/ or Renal Trauma/ or Ureteral Injuries/ or Urethral Injuries/ (95997)
- 2 \*Kidney/in [Injuries] (2766)
- 3 \*Ureter/in [Injuries] (1460)
- 4 \*Urinary Bladder/in [Injuries] (1451)
- 5 \*Urethra/in [Injuries] (1387)
- 6 \*Urinary Tract/in [Injuries] (326)
- 7 \*Urogenital System/in [Injuries] (320)
- 8 1 or 2 or 3 or 4 or 5 or 6 or 7 (102350)
- 9 ((Trauma\* or assault\* or injur\*) and flank).ti,ab,kw. or hematuri\*.kw. or renal injur\*.ti,ab,kw. or kidney trauma\*.ti,ab,kw. or renal trauma\*.ti,ab,kw. or ureter injur\*.ti,ab,kw. or ureteral injur\*.ti,ab,kw. or bladder injur\*.ti,ab,kw. or urethral injur\*.ti,ab,kw. or genitourinary trauma\*.ti,ab,kw. or urogenital trauma\*.ti,ab,kw. or genital trauma\*.ti,ab,kw. or urinary tract injur\*.ti,ab,kw. or genitourinary injur\*.ti,ab,kw. (23779)
- 10 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Cystography/ or Urography/ (985679)
- 11 (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\*).kw. or Magnetic Resonance Imaging/ or MRI.mp. or CT angiograph\*.kw. or DMSA renal/ or DTPA renal/ or enterograph\*.kw. or cystograph\*.kw. or Liver spleen scan/ or Urograph\*.kw. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word] (839541)
- 12 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect.ti,ab,kw. or accura\*.ti,ab,kw. or identificat\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positive\*.tw. or true negative\*.tw. or detection rate.tw. or predictive value\*.ti,ab,kw. (9357184)
- 13 (8 or 9) and (10 or 11) and 12 (3435)
- 14 limit 13 to (abstracts and english language and humans and yr="2013 -Current") (831)
- 15 limit 14 to "all child (0 to 18 years)" (203)
- 16 14 not 15 (628)
- 17 limit 16 to case reports (179)
- 18 16 not 17 (449)
- 19 Hematuria/ or Renal Trauma/ or Ureteral Injuries/ or Urethral Injuries/ (12944)
- 20 Biliary Tract/in [Injuries] (314)
- 21 Liver.mp. (1296102)
- 22 Gallbladder.mp. (50132)
- 23 \*Kidney/in [Injuries] (2766)
- 24 \*Ureter/in [Injuries] (1460)
- 25 \*Urinary Bladder/in [Injuries] (1451)
- 26 \*Urethra/in [Injuries] (1387)
- 27 \*Urinary Tract/in [Injuries] (326)
- 28 \*Urogenital System/in [Injuries] (320)
- 29 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 (1354517)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

30 ((Trauma\* or assault\* or injur\*) and flank).ti,ab,kw. or hematuri\*.kw. or renal injur\*.ti,ab,kw. or kidney trauma\*.ti,ab,kw. or renal trauma\*.ti,ab,kw. or ureter injur\*.ti,ab,kw. or ureteral injur\*.ti,ab,kw. or bladder injur\*.ti,ab,kw. or urethral injur\*.ti,ab,kw. or genitourinary trauma\*.ti,ab,kw. or urogenital trauma\*.ti,ab,kw. or genital trauma\*.ti,ab,kw. or urinary tract injur\*.ti,ab,kw. or genitourinary injur\*.ti,ab,kw. or hepatobiliary.ti,ab,kw. or biliary tract.ti,ab,kw. or bile duct\*.ti,ab,kw. or biliary injur\*.ti,ab,kw. or biliary trauma\*.ti,ab,kw. (106568)

31 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Cystography/ or Urography/ (985679)

32 (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\* or KUB).ti,ab,kw. or Magnetic Resonance Imaging/ or MRI.mp. or CT angiograph\*.ti,ab,kw. or DMSA renal/ or DTPA renal/ or enterograph\*.ti,ab,kw. or DTPA scan\*.ti,ab,kw. or cystograph\*.ti,ab,kw. or Liver spleen scan/ or Urograph\*.ti,ab,kw. (3286756)

33 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect.ti,ab,kw. or accura\*.ti,ab,kw. or identificat\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positive\*.tw. or true negative\*.tw. or detection rate.tw. or predictive value\*.ti,ab,kw. (9357184)

34 ("motor vehicle collision" or Accidents, Traffic or fall or Accidental Falls or assault or violence or sex offenses or assault or intimate partner violence).mp. (306644)

35 (29 or 30) and (31 or 32) and 33 and 34 (534)

36 limit 35 to (abstracts and english language and humans and yr="2013 -Current") (112)

37 ("case reports" or "clinical conference" or comment or congress or editorial or letter or news).pt. or ("case report\*" or comment\* or editorial or letter or news).ti. or ((protocol and (study or trial)) not ("therapy protocol\*" or "treatment protocol\*")).ti,ab,kw. (5129363)

38 36 not 37 (54)

39 exp \*adolescent/ or exp \*child/ or exp \*infant/ or (infant disease\* or childhood disease\*).ti,kf. or (adolescen\* or babies or baby or boy? or boyfriend or boyhood or girlfriend or girlhood or child\* or girl? or infan\* or juvenil\* or kid? or minors or minors\* or neonat\* or neo-nat\* or newborn\* or new-born\* or paediatric\* or peadiatric\* or pediatric\* or perinat\* or preschool\* or puber\* or pubescen\* or school\* or teen\* or toddler? or underage? or under-age? or youth\*).ti,kf. or (pediatric\* or paediatric\* or infan\* or child\* or adolescen\* or young).jn,jw. or (pediatric\* or paediatric\* or infan\* or child\* or adolescen\* or young).in. (3337863)

40 (38 not 39) or (fall from a standing height and warrant computed tomography).tw. (44)

41 Accidental Falls\*.mp. and Tomography, X-Ray Computed/ and Neck Injuries/ (11)

42 Wounds, Nonpenetrating/ and Thoracic Injuries/ and Tomography, X-Ray Computed/ (658)

43 Tomography, X-Ray Computed/ and Abdominal Injuries/ and Multiple Trauma/ (221)

44 41 or 42 or 43 (867)

45 limit 44 to (abstracts and english language and yr="2018 -Current") (116)

46 40 or 45 (158)

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Literature Search Performed on: 07/31/2024

Beginning Date: January 2013

End Date: June 2024

Database: Ovid MEDLINE(R) ALL <1946 to July 30, 2024>

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**Search Strategy**

1 \*Urinary Bladder/in [Injuries] (1451)

2 \*Ureter/in [Injuries] (1460)

3 Ureteral Injuries/ or (Wounds/ and Injuries/) or Hematuria/ (95402)

4 \*Urogenital System/in [Injuries] (320)

5 \*Urinary Tract/in [Injuries] (326)

6 (gross hematuri\* or bladder injur\* or ureter injur\* or ureteral injur\* or ureter\* or genitourinary trauma\* or urogenital trauma\* or genital trauma\* or urinary tract injur\* or genitourinary injur\* or pelvic fracture\* or bladder\*).ti,ab,kw. (72712)

7 1 or 2 or 3 or 4 or 5 or 6 (167229)

8 motor vehicle collision/ or Traffic Accidents/ or accident\*.mp. or motor vehicle collision\*.mp. or (accident\* or car crash\* or crash\* or Automobile\* or trauma\*).ti,ab,kw. (672256)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

- 9 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Magnetic Resonance Imaging/ or Cystography/ or Fluoroscopy/ or (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\* or mri or Cystograph\* or Fluoroscop\* or DMSA or DTPA).kw. or Magnetic Resonance Imaging/ or CT angiograph\*.kw. (1560222)
- 10 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect\*.ti,ab,kw. or accura\*.ti,ab,kw. or identif\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or effic\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negativ\*.tw. or true positive\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.ti,ab,kw. or predictive valu\*.ti,ab,kw. or diagnostic accuracy/ or injury identificat\*/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.ti,ab,kw. (14162580)
- 11 diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.kw. (465381)
- 12 7 and 8 and 9 and (10 or 11) (1401)
- 13 limit 12 to (abstracts and english language and humans and yr="2013 -Current") (392)
- 14 limit 13 to "all child (0 to 18 years)" (111)
- 15 13 not 14 (281)
- 16 limit 15 to case reports (31)
- 17 (15 not 16) or (Traumatic Bladder Ruptures or Trauma to the bladder or review of urological trauma or Diagnosis of Haematuria following a Motor Vehicle Collision or Bladder injuries after external trauma).tw. (360)
- 18 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (416049)
- 19 7 and 9 and 18 (210)
- 20 limit 19 to (abstracts and english language and humans and yr="2017 -Current") (49)
- 21 limit 20 to "all child (0 to 18 years)" (18)
- 22 20 not 21 (31)
- 23 17 or 22 (385)
- 24 \*Urinary Bladder/in [Injuries] (1451)
- 25 \*Ureter/in [Injuries] (1460)
- 26 Ureteral Injuries/ or (Wounds/ and Injuries/) or Hematuria/ (95402)
- 27 \*Urogenital System/in [Injuries] (320)
- 28 \*Urinary Tract/in [Injuries] (326)
- 29 (gross hematuri\* or bladder injur\* or ureter injur\* or ureteral injur\* or ureter\* or genitourinary trauma\* or urogenital trauma\* or genital trauma\* or urinary tract injur\* or genitourinary injur\* or pelvic fracture\*or bladder\*).ti,ab,kw. (72712)
- 30 24 or 25 or 26 or 27 or 28 or 29 (167229)
- 31 motor vehicle collision/ or Traffic Accidents/ or accident\*.mp. or motor vehicle collision\*.mp. or (accident\* or car crash\* or crash\* or Automobile\* or trauma\*).ti,ab,kw. (672256)
- 32 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Magnetic Resonance Imaging/ or Cystography/ or Urography/ or Fluoroscopy/ or (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\* or mri or Cystogra\* or Fluoroscop\* or Urogra\* or DMSA or DTPA).ti,ab,kw. or Magnetic Resonance Imaging/ or CT angiograph\*.ti,ab,kw. (3741768)
- 33 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect\*.ti,ab,kw. or accura\*.ti,ab,kw. or identif\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or effic\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negativ\*.tw. or true positive\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.ti,ab,kw. or predictive valu\*.ti,ab,kw. or diagnostic accuracy/ or injury identificat\*/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.ti,ab,kw. (14162580)
- 34 diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.kw. (465381)
- 35 30 and 31 and 32 and (33 or 34) (2593)
- 36 limit 35 to (abstracts and english language and humans and yr="2013 -Current") (801)
- 37 limit 36 to "all child (0 to 18 years)" (213)
- 38 36 not 37 (588)
- 39 limit 38 to case reports (79)
- 40 38 not 39 (509)
- 41 (38 not 39) or (Traumatic Bladder Ruptures or Trauma to the bladder or review of urological trauma or Diagnosis of Haematuria following a Motor Vehicle Collision or Bladder injuries after external trauma).tw. (618)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

42 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti,ab,kw. (1908945)

43 30 and 32 and 42 (2490)

44 limit 43 to (abstracts and english language and humans and yr="2017 -Current") (608)

45 limit 44 to "all child (0 to 18 years)" (159)

46 44 not 45 (449)

47 41 or 46 (993)

48 47 not 23 (608)

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Literature Search Performed on: 01/29/2024

Beginning Date: January 2017

End Date: December 2023

Database: Ovid MEDLINE(R) ALL <1946 to January 26, 2024>

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**Search Strategy**

1 (exp "wounds and injuries"/ or exp "accidental falls"/ or "trauma\*".mp. or "mesenteric injur\*".mp. or "bowel injur\*".mp. or "bowel perforat\*".mp. or "small bowel".mp. or "duodenal hematoma".mp.) and (exp "bicycling"/ or "bicycl\*".mp. or "handlebar\*".mp. or "cycli\*".mp.) (10569)

2 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Magnetic Resonance Imaging/ (1345925)

3 (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\*).ti,ab,kw. or Magnetic Resonance Imaging/ or MRI.mp. or CT angiograph\*.ti,ab,kw. (2851360)

4 Diagnostic Errors/ or (Sensitivity/ and Specificity/) or Adverse Effects/ (409383)

5 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect.ti,ab,kw. or accura\*.ti,ab,kw. or identificat\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positive\*.tw. or true negative\*.tw. or detection rate.tw. or predictive value\*.ti,ab,kw. or diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.ti,ab,kw. (9074138)

6 1 and (2 or 3) and (4 or 5) (473)

7 limit 6 to "all child (0 to 18 years)" (157)

8 6 not 7 (316)

9 limit 8 to case reports (131)

10 8 not 9 (185)

11 limit 10 to (abstracts and english language and humans and yr="2017 -Current") (41)

12 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (406413)

13 1 and 3 and 11 (38)

14 11 or 13 (41)

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Literature Search Performed on: 01/27/2024

Beginning Date: January 2013

End Date: December 2023

Database: Ovid MEDLINE(R) ALL <1946 to January 25, 2024>

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**Search Strategy**

1 Accidental Falls/ or (Wounds/ and Injuries/) or Assault/ or Wounds, Nonpenetrating/ or (Trauma\* or assault\* or blunt).ti,ab,kw. or fall\*.mp. (808413)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

- 2 Chest/ or Thorax/ or Flail Chest/ or Thoracic Injuries/ or Rib Cage/ or Ribs/ or Pneumothorax/ or Hemothorax/ or Lung injury/ or (chest tenderness or rib cage or rib\* or pneumothorax or Lung injur\* or thorac\* or thorax or pulmon\* or chest).ti,ab,kw. or nexus.ti,kw. (1351476)
- 3 Diagnostic Imaging/ or Radiography/ or Tomography/ or X-Ray/ or tomography, x-ray Computed/ or Ultrasonography/ or Magnetic Resonance Imaging/ or Radionuclide Imaging/ or Pulmonary Ventilation/ or Pulmonary Perfusion/ or Ventilation-Perfusion Scan/ or initial imaging/ (1465580)
- 4 (imag\* or radiolo\* or radiograph\* or xray or x-ray or cxr or tomograph\* or CT scan\* or ultraso\* or sonograph\* or Radionuclide\* or scintigraph\* or resonance or mri).ti,ab,kw. (3212243)
- 5 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or effic\*.ti,ab,kw. or Adverse Effects.ti,ab,kw. or accura\*.ti,ab,kw. or identifi\*.ti,ab,kw. or detect\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or sensitiv\*.kw. or specific\*.kw. or diagnos\*.kw. or false positive\*.tw. or false negativ\*.tw. or true positiv\*.tw. or true negativ\*.tw. or detection rate\*.tw. or predictive valu\*.kw. (8706628)
- 6 1 and 2 and (3 or 4) and 5 (5799)
- 7 limit 6 to (abstracts and english language and humans and yr="2013 -Current") (2028)
- 8 limit 7 to "all child (0 to 18 years)" (561)
- 9 7 not 8 (1467)
- 10 limit 9 to case reports (258)
- 11 9 not 10 (1209)
- 12 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (406303)
- 13 1 and 2 and 4 and 12 (262)
- 14 limit 13 to (abstracts and english language and humans and yr="2017 -Current") (82)
- 15 limit 14 to "all child (0 to 18 years)" (19)
- 16 14 not 15 (63)
- 17 11 or 16 (1249)

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Literature Search Performed on: 01/26/2024

Beginning Date: January 2013

End Date: December 2023

Database: Ovid MEDLINE(R) ALL <1946 to January 25, 2024>

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**Search Strategy**

- 1 (Wounds/ and Injuries/) or Pain/ or Upper Abdomen/ or Spleen injuries/ or Abdominal Pain/ or (left upper quadrant or abdom\* or trauma\* or spleen injur\*).ti,ab,kw. or splenic injur\*.mp. (1056981)
- 2 (sport\* or athlet\* or Exercis\* or physical\*).ti,ab,kw. or Sports/ or Athletic Injuries/ or Sports Medicine/ or Exercise/ (1374718)
- 3 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Fluoroscopy/ (976364)
- 4 (imag\* or radio\* or CT scan\* or ultraso\* or enterograph\* or Fluoroscop\*).ti,ab,kw. (2963445)
- 5 Diagnostic Errors/ or (Sensitivity/ and Specificity/) or Adverse Effects/ (409361)
- 6 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or (Adverse Effect\* or effic\* or accura\* or identifi\* or adverse effects or sensitiv\* or specific\* or diagnos\* or diagnos\* or Error\* or predictive valu\*).ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positiv\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.tw. or diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ (11524569)
- 7 1 and 2 and (3 or 4) and (5 or 6) (7952)
- 8 limit 7 to (abstracts and english language and humans and yr="2013 -Current") (2847)
- 9 limit 8 to "all child (0 to 18 years)" (780)
- 10 8 not 9 (2067)
- 11 limit 10 to case reports (419)
- 12 10 not 11 (1648)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

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Literature Search Performed on: 01/26/2024  
Beginning Date: January 2013  
End Date: December 2023  
Database: Ovid MEDLINE(R) ALL <1946 to January 25, 2024>

**Search Strategy**

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- 1 \*Urinary Bladder/in [Injuries] (1451)
- 2 \*Ureter/in [Injuries] (1460)
- 3 Ureteral Injuries/ or (Wounds/ and Injuries/) or Hematuria/ (94502)
- 4 \*Urogenital System/in [Injuries] (320)
- 5 \*Urinary Tract/in [Injuries] (327)
- 6 (gross hematuri\* or bladder injur\* or ureter injur\* or ureteral injur\* or ureter\* or genitourinary trauma\* or urogenital trauma\* or genital trauma\* or urinary tract injur\* or genitourinary injur\* or pelvic fracture\*or bladder\*).ti,ab,kw. (71367)
- 7 1 or 2 or 3 or 4 or 5 or 6 (165014)
- 8 motor vehicle collision/ or Traffic Accidents/ or accident\*.mp. or motor vehicle collision\*.mp. or (accident\* or car crash\* or crash\* or Automobile\* or trauma\*).ti,ab,kw. (654941)
- 9 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Magnetic Resonance Imaging/ or Cystography/ or Fluoroscopy/ or (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\* or mri or Cystograph\* or Fluoroscop\* or DMSA or DTPA).kw. or Magnetic Resonance Imaging/ or CT angiograph\*.kw. (1530906)
- 10 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect\*.ti,ab,kw. or accura\*.ti,ab,kw. or identif\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or effic\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negativ\*.tw. or true positive\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.ti,ab,kw. or predictive valu\*.ti,ab,kw. or diagnostic accuracy/ or injury identificat\*/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.ti,ab,kw. (13712029)
- 11 diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.kw. (457035)
- 12 7 and 8 and 9 and (10 or 11) (1389)
- 13 limit 12 to (abstracts and english language and humans and yr="2013 -Current") (383)
- 14 limit 13 to "all child (0 to 18 years)" (109)
- 15 13 not 14 (274)
- 16 limit 15 to case reports (28)
- 17 (15 not 16) or (Traumatic Bladder Ruptures or Trauma to the bladder or review of urological trauma or Diagnosis of Haematuria following a Motor Vehicle Collision or Bladder injuries after external trauma).tw. (353)
- 18 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (406303)
- 19 7 and 9 and 18 (204)
- 20 limit 19 to (abstracts and english language and humans and yr="2017 -Current") (45)
- 21 limit 20 to "all child (0 to 18 years)" (17)
- 22 20 not 21 (28)
- 23 17 or 22 (376)

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Literature Search Performed on: 01/26/2024  
Beginning Date: January 2013  
End Date: December 2023  
Database: Ovid MEDLINE(R) ALL <1946 to January 25, 2024>

**Search Strategy**

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- 1 motor vehicle collision\*.mp. or seatbelt/ or Seat Belt/ or Traffic Accidents/ or (seatbelts or seat belt\* or seat-belt\* or bucket-handle\* or restrain\* or accident\* or car crash\* or crash\* or Automobile\*).ti,ab,kw. (240188)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

- 2 (Wounds/ and Injuries/) or trauma\*.mp. or contusion/ or Contusions/ or spleen/ or liver/ or kidney/ or pancreas/ or bowel/ or mesentery/ or spleen/ or splenic/ or liver/ or hepatic/ or (kidn\* or pancrea\* or mesenter\*or injur\* or trauma\*).ti,ab,kw. (2098556)
- 3 (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\* or mri or enterograph\*).kw. or Tomography, X-Ray Computed/ or Magnetic Resonance Imaging/ or mri.mp. or CT angiograph\*.kw. (1145703)
- 4 Diagnostic Errors/ or (Sensitivity/ and Specificity/) or Adverse Effects/ (409361)
- 5 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or effic\*.ti,ab,kw. or Adverse Effect\*.ti,ab,kw. or accura\*.ti,ab,kw. or identif\*.ti,ab,kw. or adverse effects.ti,ab,kw. or sensitiv\*.kw. or specific\*.kw. or diagnos\*.kw. or false positiv\*.tw. or false negativ\*.tw. or true positive\*.tw. or true negativ\*.tw. or detection rat\*.tw. or detect\*.tw. or predictive valu\*.kw. or diagnostic accuracy/ or injury identification/ or adverse effects/ or sensitivity/ or specificity/ or diagnos\*.kw. (9493638)
- 6 1 and 2 and 3 and (4 or 5) (1286)
- 7 limit 6 to (abstracts and english language and humans and yr="2013 -Current") (462)
- 8 limit 7 to "all child (0 to 18 years)" (169)
- 9 7 not 8 (293)
- 10 limit 9 to case reports (116)
- 11 (9 not 10) or (The abdominal seatbelt sign or Seat belt-related injuries or patients with seatbelt signs or Seat Belt Sign as Evidence or Bucket-Handle Mesenteric Tears).tw. (204)
- 12 ("consensus development conference" or "practice guideline").pt. or "guidelines as topic"/ or exp consensus/ or exp "practice guidelines as topic"/ or ("appropriate use criteria" or "appropriateness criteria" or "best practice\*" or consensus or "expert opinion\*" or guidance or guideline\* or policy or "position paper\*" or "practice bulletin\*" or "practice parameter\*" or recommended or recommendation\* or statement\*).ti. (406303)
- 13 1 and 2 and 3 and 12 (51)
- 14 limit 13 to (abstracts and english language and humans and yr="2017 -Current") (7)
- 15 11 or 14 (209)

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Literature Search Performed on: 01/26/2024

Beginning Date: January 2013

End Date: December 2023

Database: Ovid MEDLINE(R) ALL <1946 to January 25, 2024>

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**Search Strategy**

- 1 (Wounds/ and Injuries/) or Assault/ or Flank Pain/ or Hematuria/ or Renal Trauma/ or Ureteral Injuries/ or Urethral Injuries/ (95091)
- 2 \*Kidney/in [Injuries] (2767)
- 3 \*Ureter/in [Injuries] (1460)
- 4 \*Urinary Bladder/in [Injuries] (1451)
- 5 \*Urethra/in [Injuries] (1387)
- 6 \*Urinary Tract/in [Injuries] (327)
- 7 \*Urogenital System/in [Injuries] (320)
- 8 1 or 2 or 3 or 4 or 5 or 6 or 7 (101446)
- 9 ((Trauma\* or assault\* or injur\*) and flank).ti,ab,kw. or hematuri\*.kw. or renal injur\*.ti,ab,kw. or kidney trauma\*.ti,ab,kw. or renal trauma\*.ti,ab,kw. or ureter injur\*.ti,ab,kw. or ureteral injur\*.ti,ab,kw. or bladder injur\*.ti,ab,kw. or urethral injur\*.ti,ab,kw. or genitourinary trauma\*.ti,ab,kw. or urogenital trauma\*.ti,ab,kw. or genital trauma\*.ti,ab,kw. or urinary tract injur\*.ti,ab,kw. or genitourinary injur\*.ti,ab,kw. (23070)
- 10 Diagnostic Imaging/ or Radiography/ or Tomography, X-Ray Computed/ or Ultrasonography/ or Cystography/ or Urography/ (976492)
- 11 (imag\* or radio\* or CT scan\* or ultraso\* or sonograph\*).kw. or Magnetic Resonance Imaging/ or MRI.mp. or CT angiograph\*.kw. or DMSA renal/ or DTPA renal/ or enterograph\*.kw. or cystograph\*.kw. or Liver spleen scan/ or Urograph\*.kw. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word] (811317)

**Literature Search**  
**ACR Appropriateness Criteria®**  
**Minor Blunt Trauma**

12 Error\*.ti,ab,kw. or (Sensitivity/ and Specificity/) or Adverse Effect.ti,ab,kw. or accura\*.ti,ab,kw. or identificat\*.ti,ab,kw. or adverse effect\*.ti,ab,kw. or sensitiv\*.ti,ab,kw. or specific\*.ti,ab,kw. or diagnos\*.ti,ab,kw. or false positive\*.tw. or false negative\*.tw. or true positive\*.tw. or true negative\*.tw. or detection rate.tw. or predictive value\*.ti,ab,kw. (9070285)

13 (8 or 9) and (10 or 11) and 12 (3394)

14 limit 13 to (abstracts and english language and humans and yr="2013 -Current") (803)

15 limit 14 to "all child (0 to 18 years)" (198)

16 14 not 15 (605)

17 limit 16 to case reports (171)

18 16 not 17 (434)

**Summary**

<b>Source</b>	<b>#Unique Refs</b>	<b>#Retained Refs</b>
Old bibliography	0	0
Literature Search(es)	4541	93
Author Added	7	4
Supporting Docs	6	3
Total		100

References from the literature search that were not retained had a poor study design, were not relevant to the topic, or had unclear or biased results.