What's New

May 2019

Loin Pain (Acute Pyelonephritis)

UPDATE: Indications for imaging have been added to the pathway. Ultrasound is usually the most appropriate initial investigation. View the pathway

Intrauterine Growth Restriction (Suspected)

UPDATE: Following a review of the current literature, uterine artery Doppler is no longer recommended. The risk factors for IUGR have been updated. Low PAPP-A alone is not a strong indication for screening. View the pathway

First-Trimester Screening

UPDATE: The algorithm has been revised in line with the 2018 RANZCOG Guideline on Prenatal Screening. Non-invasive prenatal testing (NIPT) may be used as a secondary or primary screening test. Combined first trimester screen risk is now stratified into 'low', 'intermediate', 'high' and 'very high' risk. View the pathway

Iliac Fossa Pain (Acute Left)

UPDATE: This pathway has been expanded and the role of CT has been updated. Barium enema has been removed from the pathway.View the pathway

Chronic Shoulder Pain

NEW: This new pathway provides guidance on the imaging of adult patients with subacute or chronic shoulder pain without a definite precipitating event, or patients with persistent shoulder pain following an injury despite conservative management. View the pathway

Acute Shoulder Injury

NEW: This revised pathway replaces the Shoulder Pain or Instability Pathway. Where initial imaging is indicated, shoulder radiographs are usually the most appropriate modality. Not all injuries require imaging and initial conservative management is appropriate in many cases. View the pathway

Nipple discharge

UPDATE: This pathway has been revised to be in line with the 2017 Cancer Australia Guideline. Mammogram and ultrasound are both indicated for the investigation of any discharge with features associated with malignancy. Discharge cytology is also recommended. All cases of nipple discharge should be followed up even if there are no concerning features, and referral considered if symptoms do not resolve. View the pathway

Breast Symptom (New)

UPDATE: This revised pathway provides guidance for the investigation of women at any risk presenting with a new breast symptom including a new breast lump, pain or skin changes. This pathway has been

expanded and revised to be in line with the 2017 Cancer Australia Guideline. The most reliable way to diagnose breast cancer is through the Triple Test. Specialist referral is indicated if any component of the Triple Test is indeterminate, suspicious or malignant. The Breast Lump pathway is now included in the New Breast Symptom Pathway. View the pathway

Pancreatitis (Acute)

UPDATE: Following a review of the current literature, this pathway now includes guidance on the investigation of acute pancreatitis with no cause identified on abdominal ultrasound or in clinical history, including recommendations on the use of EUS, MRCP and sMRCP. View the pathway

Pancreatitis (Chronic)

UPDATE: This pathway has been expanded following a review of the current literature and now includes information on the use of sMRCP and ePFT. View the pathway

Peripheral Arterial Disease

UPDATE: This pathway provides guidance on the investigation of adults with suspected peripheral arterial disease. This pathway has been updated to include information on modern multislice CT and the use of angiography to plan open surgical intervention. View the pathway

Stable Angina

NEW: This new pathway provides guidance on the imaging investigation of adult patients with suspected stable angina, with particular focus on the use of CT coronary angiography as the first line imaging investigation in patients with no prior confirmed coronary artery disease. This pathway is in line with the 2016 NICE Guidelines. View the pathway

Suspected ACS (Suspected)

UPDATE: This pathway has been revised to now reflect the widespread use of high sensitivity troponin assays and to include the use of CT coronary angiography as the first-line non-invasive investigation for coronary artery disease, instead of functional imaging. View the pathway

Chronic Sinusitis (Suspected)

UPDATE: Chronic rhinosinusitis is a clinical diagnosis that should be confirmed with objective evidence of sinonasal inflammation, either with rhinoscopy/nasendoscopy or radiographically. However incidental imaging findings without clinical symptoms do not imply chronic rhinosinusitis. View the pathway

Scrotal Mass

UPDATE: This algorithm is now simplified. Ultrasound is the initial investigation of any suspected scrotal mass and any mass in the body of the testicle should be treated as malignancy until proven otherwise. View the pathway

Abdominal Plain X-Ray (Indications)

UPDATE: This algorithm has been updated. In patients with suspected perforation, erect chest radiograph is recommended to assess for pneumoperitoneum as it is more sensitive than supine abdominal

radiographs. Hidden sections now include expanded information on the sensitivity and specificity of abdominal radiographs for different pathologies. There is also information on how low-dose CT may replace abdominal radiographs in some cases. View the pathway

Wrist fracture (Suspected)

NEW: Previously the imaging pathway for suspected scaphoid fractures, this revised pathway also includes guidance for the diagnosis of other wrist fractures, including those that may be occult on initial plain films. Advanced imaging with MRI or CT reduces overtreatment of suspected fractures when available. MRI is also recommended when ligamentous injuries are suspected. If advanced imaging is not readily available, presumptive casting and repeat plain radiographs, or delayed advanced imaging, remains a feasible option. View the pathway

Drug Trafficking

UPDATE: This algorithm has been revised. Depending on clinical situation, non-contrast low-dose CT or abdominal plain radiographs may be appropriate initial imaging modalities. However, plain radiographs are not accurate to exclude retained packages so CT is recommended if clearance is required prior to discharge. View the pathway

Haemoptysis

UPDATE: Previously two diagrams for massive and non-haemoptysis, this revised algorithm incorporates both presentations. The algorithm has been simplified with updates to information about imaging modalities. CT angiography, rather than CTPA (CT pulmonary angiography) is recommended for the assessment of haemoptysis, as pulmonary and systemic arteries that commonly cause bleeding are not always opacified on CTPA. View the pathway

Blunt Cerebrovascular Injury

UPDATE: Previously called “Cerebrovascular Blunt Trauma”, this pathway has been updated with the New Denver screening criteria for blunt carotid and vertebral artery injuries. MRI and MRA are now included in the algorithm. There is expansion of information on the role of screening, and particularly the risk of BCVI following non-fatal strangulation. View the pathway

Hypertension

UPDATE: The revised pathway now includes indications for the further investigation of hypertension, with expansion of teaching points and information on causes of secondary hypertension. View the pathway

Aortic dissection (spontaneous)

UPDATE: Following review of the literature, this pathway has been expanded. Algorithm now includes consideration of clinical suspicion when considering whether chest radiography or CT should be the initial investigation. View the pathway

Bowel Obstruction (Suspected)

UPDATE: Following a review of the current literature, this pathway has been revised to include CT and MR enterography and enteroclysis in addition to fluoroscopic examinations. Contrast enema may be replaced by CT, with enema contrast in select cases. View the pathway

Chronic Thromboembolic Pulmonary Hypertension (Suspected)

NEW: This new pathway provides guidance on the imaging of adult patients with suspected chronic thromboembolic pulmonary hypertension (CTEPH). This includes patients who are being followed-up after pulmonary embolism. If CTEPH is suspected, a V/Q (ventilation/ perfusion) scan is the initial investigation of choice. View the pathway

February 2019

Pancreatitis (Chronic)

UPDATE: This pathway has been expanded and now includes the use of secretin-stimulated magnetic resonance cholangiopancreatography (sMRCP) and the secretin endoscopic pancreatic function test (ePFT). View the pathway

December 2018

Nipple Discharge

UPDATE: This pathway has been revised to be in line with the 2017 Cancer Australia Guideline. Mammogram and ultrasound are both indicated for the investigation of any discharge with features associated with malignancy. Discharge cytology is also recommended. All cases of nipple discharge should be followed up even if there are no concerning features, and referral considered if symptoms do not resolve. View the pathway

Breast Symptom (New)

UPDATE: This revised pathway provides guidance for the investigation of women at any risk presenting with a new breast symptom including a new breast lump, pain or skin changes. This pathway has been expanded and revised to be in line with the 2017 Cancer Australia Guideline. The most reliable way to diagnose breast cancer is through the Triple Test. Specialist referral is indicated if any component of the Triple Test is indeterminate, suspicious or malignant. The Breast Lump pathway is now included in the New Breast Symptom Pathway. View the pathway

Pancreatitis (Acute)

UPDATE: Following a review of the current literature, this pathway now includes guidance on the investigation of acute pancreatitis with no cause identified on abdominal ultrasound or in clinical history, including recommendations on the use of EUS, MRCP and sMRCP. View the pathway

June 2018

Head Injury (Adult)

UPDATE: This pathway has been streamlined. The Canadian CT Head rules are recommended to guide the use of CT head in adults presenting with an acute blunt head injury. Clinical judgement should be used in the decision to perform imaging in patients who present without loss of consciousness or amnesia, as there is still a risk of intracranial injury in these patients if other risk factors are present. View the pathway

Abdominal Aortic Aneurysm (Repair Follow-up)

UPDATE: The imaging recommendations for follow-up of endovascular aortic aneurysm repair (EVAR) have been updated based on the 2018 Society for Vascular Surgery practice guidelines. CTA and duplex US are recommended at one-month and one-year post-op, then annual surveillance with duplex US may be appropriate thereafter. View the pathway

Bronchiectasis

UPDATE: More details now included in teaching points. An updated search and review of the literature further supported recommendations and there are no major changes to the pathway. View the pathway

Acute Scrotal Pain

UPDATE: This algorithm has been simplified. Testicular torsion is a clinical diagnosis and imaging is not indicated prior to surgical exploration. Any presentation that is suspicious or equivocal for testicular torsion should be referred to an emergency department for urgent surgical assessment. View the pathway

Spinal Cord Compression (Suspected)

UPDATE: This algorithm has been simplified. All patients with suspected acute spinal cord should be urgently assessed by a senior clinician, which includes emergency or medical physicians and surgeons, and proceed to MRI if clinical findings are consistent with acute spinal cord compression. View the pathway

Peripheral Stent Follow-Up

UPDATE: The algorithm has been revised to focus on the use of ABI and Doppler US for close surveillance, as well as to consider which patients require follow-up. The increasing use of non-invasive angiography has also been incorporated. View the pathway

Hyperthyroidism

UPDATE: The algorithm has been updated to include consideration of thyroid hormone resistance and the presence of TSH receptor antibodies. Grave's disease can often be diagnosed clinically and imaging is not required unless the aetiology of hyperthyroidism is uncertain. View the pathway

May 2018

Chest X-Ray (Pre-operative)

UPDATE: Following a review of the current literature and guidelines, the indications for preoperative chest radiographs have been revised. Chest radiographs may be indicated for the evaluation of patients with acute symptoms, as well as for surgical planning and oncology staging. View the pathway

Non-Small Cell Lung Cancer (Staging)

UPDATE: This pathway has been significantly revised and simplified. The AJCC Cancer Staging System guidelines are now included and there is new information on the role of PET/CT. View the pathway

April 2018

Phaeochromocytoma

UPDATE: This pathway has been simplified with an update of teaching points following review of the current literature. Adrenal gland CT is recommended to evaluate biochemically confirmed phaeochromocytoma, with information on complimentary functional tests. View the pathway

Cushing's Syndrome

UPDATE: The revised pathway now focusses on the importance of biochemical diagnosis prior to imaging, including considering ectopic ACTH production when very high levels are present. The algorithm also includes information on IPSS. View the pathway

March 2018

Goitre (Investigation)

UPDATE: Following a review of the current literature, thyroid ultrasound is no longer routinely indicated in the investigation of goitre. View the pathway

February 2018

Hyperaldosteronism (Primary Suspected)

UPDATE: Now includes information on adrenal vein sampling and confirmatory testing. View the pathway

Pulmonary Embolism (Haemodynamically Stable)

UPDATE: Low-dose CT now removed from the pathway and the use of lower limb ultrasound has been revised. This update now includes information on the Pulmonary Embolism Rule-Out Criteria (PERC). There is a new 'What do I need to know' box with quick questions to help clinicians decide on appropriate investigations. View the pathway

December 2017

Deep Venous Thrombosis (Arm)

UPDATE: More details now included in teaching points. An updated search and review of the literature further supported recommendations and there are no major changes to the pathway. View the pathway

Deep Venous Thrombosis (Leg)

UPDATE: More details now included in teaching points. An updated search and review of the literature further supported recommendations and there are no major changes to the pathway. View the pathway

Solid Pulmonary Nodules

UPDATE: Now revised to incorporate the 2017 Fleishner Society Guidelines for management of pulmonary nodules detected on CT scans, with management now divided according to the CT attenuation of the nodule. There is a new 'What do I need to know' box with quick questions to help clinicians decide on appropriate follow-up. View the pathway

Paediatric: Scoliosis (Adolescent)

UPDATE: This algorithm has been simplified and no longer includes ‘lateral bending views’ and ‘pre-operative MRI’. Indications for CT have been revised and specialist orthopaedic opinion is now also advised. View the pathway

Paediatric: Magnetic Resonance Imaging

UPDATE: This pathway has now been simplified with updated references and a revision of the teaching points. View the pathway

November 2017

NEW: Subsolid Pulmonary Nodules

This new pathway provides guidance on the imaging surveillance of adult patients with subsolid pulmonary nodules. This pathway is based on guidelines that do not apply to patients younger than 35 years, immunocompromised patients or patients with cancer. View the pathway

Paediatric: Knee Pain

UPDATE: Now includes more information on the use of MRI. An updated search and review of the literature further supported recommendations there are no major changes to the pathway. View the pathway

October 2017

Paediatric: Headache (Recurrent)

UPDATE: Now includes more information is on the use of MRI versus CT, with expansion of teaching points and further details on ‘Red flags’. An updated search and review of the literature further supported recommendations and there are no major changes to the pathway. View the pathway

Paediatric: Head Trauma

UPDATE: Algorithm now changed to incorporate the PECARN decision rules along with the CATCH rules. There are now more details on the role of MRI in the sub-acute setting. View the pathway