

## Diagnostic Imaging

# **COMPUTED TOMOGRAPHY (CT)**

**CONSULTATION REQUEST** 

### Guidelines: Regional Inpatient? ☐ Yes ☐ No

 Healthcare Provider to complete requisition. Incomplete requisitions will be returned.

	Imaging Cen 3. If there is releprovide repo Is the patient hea	ons including Restral Intake 1-85 evant prior imagerts with requisitioning impaired	5-978-1 ging fron on. ?	862 n outside Yes □	facilities			
Ī	Does patient require an interpreter? Yes □ No □  CT Exam Requested – Please be specific / specify levels							
	☐ Thorax	☐ Head		rvical S	-			
	□ Abdomen	_						
		□ Neck						
	☐ Renal Colic							
	☐ Other							
		Hemogl	ohin		Dat	te Obta	ined	
	PTT	Platelet	s					
	Clinical Inform							
	-							
	-							
		☐ Cancer Staging and/or Diagnosis						
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	□ Cancer Stag	ging and/or Dia	agnosis					
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Patient Name:	
D.O.B. (YYYY-MM-DD):	
Address:	
City/Town, Prov:	
Postal Code:	_Tel:
Health Card #:	

Patient Name	
Last Name	First Name
Date of Birth	_ Sex □ Male □ Female
Health CardAddress	
City	
Telephone Home ()  Business ()  Workplace Safety Insurance Box	Cell ()
□ Other Insurance Claim Number	
Guidance screening:	
Kidney problems or transplant?	□ Yes □ No
Waiting to see a kidney specialist or u	urologist? ☐ Yes ☐ No
If yes to the above, an eGFR eval prior to iodinated contrast exam.  eGFR (estimated Glomerular Filtration Rate)  Date of blood test (Please specify if pending)	
prior to iodinated contrast exam.  eGFR (estimated Glomerular Filtration Rate)  Date of blood test	
prior to iodinated contrast exam.  eGFR (estimated Glomerular Filtration Rate)  Date of blood test (Please specify if pending)  Is patient on dialysis?  (See Thunder Bay Regional Health Science reverse side for Screening and Prevented Allergies  Allergies Allergy to IV contrast media containin  • Will patient be pre-medicated?  Allergy to medications?	☐ Yes ☐ No  Proces Centre Guidelines on ion of Contrast Nephropathy).
prior to iodinated contrast exam.  eGFR (estimated Glomerular Filtration Rate)  Date of blood test (Please specify if pending)  Is patient on dialysis?  (See Thunder Bay Regional Health Science reverse side for Screening and Prevented Allergies  Allergies  Allergy to IV contrast media containin • Will patient be pre-medicated?	Proces Centre Guidelines on ion of Contrast Nephropathy).

#### **GUIDELINES FOR SCREENING AND PREVENTION OF CONTRAST INDUCED NEPHROPATHY**

(Adapted from the 2022 Canadian Association of Radiologists - Webpage: http://www.car.ca)

**CONTRAST INDUCED NEPHROPATHY (CIN)** is an acute deterioration of renal function that occurs 24 to 48 hours following injection of iodinated contrast media for CT scans, angiograms and venograms. The most important risk factor is pre-existing renal impairment, particularly Diabetic Nephropathy.

**FOR PATIENTS WITH 1 OR MORE RISK FACTORS for impaired renal function**, an eGFR (estimated Glomerular Filtration Rate) will be required within three (3) months prior to an intravenous contrast CT examination. For inpatients, the eGFR must be acquired within **7 days**. In emergent situations, eGFR may be waived – proceed with intravascular volume expansion.

ALL PATIENTS with eGFR >30 ml/min/1.73 m <sup>2</sup>	PATIENTS with eGFR less than 30 ml/min/1.73 m <sup>2</sup>				
Proceed with indicated contrast imaging study	Individual patient decision to explain and balance the risks of CA-AKI against the risks and uncertainties or delayed or suboptimal imaging.  There is a lack of evidence on benefit of volume expansion; institutions may choose practices best suited to their local environments.				
Hold nephrotoxic drugs 48 hours prior to contrast when possible. ( <b>Nephrotoxic Drugs include</b> : loop diuretics, amphotericin B, aminoglycosides, vancomycin, non-steroidal anti-inflammatory drugs, cancer and immune suppressant chemotherapy) <b>Vascular disease:</b> hypertension, congestive heart disease, cardiac or peripheral vascular disease <b>Collagen Vascular Disease:</b> a heterogeneous group of autoimmune disorders of unknown etiology. They include systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), progressive systemic sclerosis (PSS), scleroderma (SD), dermatomyositis (DM)/polymy (PM), ankylosing spondylitis (AS), Sjögren syndrome (SS), and mixed connective-tissue disease (MCTD).					
Hold diuretics especially Furosemide at least 24 hours prior to contrast, when possible.					
Do not recommend restricting medically indicated repeat contrast doses in lower risk patients (eGFR >30, no AKI, IV route)					

### EVALUATION OF FOLLOW-UP RENAL FUNCTION TESTS IS THE RESPONSIBILITY OF THE ORDERING PHYSICIAN.

#### **METFORMIN PROTOCOL:**

Patients with eGFR  $\leq$  30 mL/min/1.73 m<sup>2</sup> or AKI, metformin should be held at the time of, or prior to, ICM administration, and should not be restarted for at least 48 hours and only then if kidney function remains stable (<25% increase compared with baseline creatinine) and the ongoing use of metformin has been re-assessed by the patient's clinical team.

CONTRAST MEDIA ALLERGY PREMEDICATION (See Guidelines: http://www.car.ca)

- Prednisone 50 milligrams orally, thirteen (13), seven (7) and one (1) hour prior to study
- Diphenhydramine (Benadryl) 50 milligrams orally one (1) hour prior to study

#### **BREASTFEEDING PATIENTS**

It is recommended that patients who have had an injection of contrast media should stop breastfeeding for 24 hours after their CT scan. Patients should pump and discard breast milk during these 24 hours. Patients should consider pumping and saving breast milk prior to the scan.

CA-AKI – Contrast Associated Acute Kidney Injury