

Name of Policy: Extravasations of Contrast Policy Number: 3364-135-044 Approving Officer: Chief Executive Officer Responsible Agent: Assistant Professor & Deputy Clinical Service Chief Director Radiology Scope: The University of Toledo Medical Center		 Effective date: Original effective date: January 5, 2009	
Key words: Contrast Media, ACR manual, guidelines & policies, patient safety, standardized treatment			
	New policy proposal	<input checked="" type="checkbox"/>	Minor/technical revision of existing policy
	Major revision of existing policy	<input type="checkbox"/>	Reaffirmation of existing policy

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(A) Introduction

“Various forms of contrast media have been used to improve medical imaging. Their value has long been recognized, as attested to by their common daily use in imaging departments worldwide. Like all other pharmaceuticals, however, these agents are not completely devoid of risk.” –ACR Manual on Contrast Media - ~~Version 2025~~ [Refer to the most current version of ACR Manual on Contrast Media.](#)

The majority of the following guidelines and policies are derived, many times verbatim, from the ACR Manual on Contrast Media [Refer to the ~~most current version of the ACR Manual on Contrast Media.~~ ~~version 2025.~~](#) Additional references will be provided as needed or requested.

The major purpose of these guidelines and policies is to assist attending and resident radiologists, technologists, and referring clinicians in recognizing and managing the small but real risks inherent in the use of intravenous contrast media utilized at The University of Toledo Medical Center.

As would be appropriate with any diagnostic procedure, preliminary considerations for the referring physician and the radiologist include:

- Assessment of patient risk versus potential benefit of the contrast assisted examination.
- Imaging alternatives that would provide the same or better diagnostic information.

- Assurance of a valid clinical indication for each contrast medium administration.

~~(C)~~(B) **Purpose of policy**

Improve patient safety through standardized treatment and documentation following a contrast extravasation.

(C) Scope

All health care professionals involved in caring for patients with iodinated or gadolinium-based contrast extravasation.

(D) Procedure

- (1) Treatment of extravasations is generally palliative. Typically, the initial treatment of the extravasation site should include:
 - (a) Elevating the affected extremity above the heart.
 - (b) Ice packs may be applied to the site for a period of 10-20 minutes and then intermittently.
- (2) The observations should include, but are not limited to:
 - (a) Increasing swelling or pain.
 - (b) Altered tissue perfusion.
 - (c) Skin blistering.
- (3) Observation and intervention will be documented by the radiologist or radiology resident on the contrast extravasation form (attached after the signature block for this policy), which will then be scanned into the Radiology Information System (RIS). Documentation in the radiology report is recommended.
- (4) The length of outpatient observation time will be at the discretion of the treating physician, but no less than 30 minutes. The nurse, technologist, or assistant technologist in the examination room may observe patients.
- (5) Following the initial observations and treatment, inpatients with contrast extravasations will subsequently be managed on their own units.
- (6) Patients who develop significant clinical symptoms or have extravasation greater than 100 ml should be seen in consultation with the plastic surgery service. These symptoms would include:

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- (a) Skin blistering.
 - (b) Decreased capillary refill.
 - (c) Increasing or persistent pain after one hour.
- (7) Discharge instructions should be given to the outpatient. This should include the radiology phone number to call during the day and after routine working hours, along with what signs and symptoms should be observed.

See separate document for contrast extravasation form.

<p>Approved by:</p> <p>_____</p> <p>Daniel Barbee, MBA, BSN, RN, FACHE Chief Executive Officer</p> <p>_____</p> <p>Date</p> <p>_____</p> <p>Nathan Egbert, MD Assistant Professor & Deputy Clinical Service Chief</p> <p>_____</p> <p>Date</p> <p>_____</p> <p>Ryan Landis, BSRT (R)(CT) Director, Radiology</p> <p>_____</p> <p>Date</p> <p><i>Review/Revision Completed by:</i> Ryan Landis, BSRT (R)(CT) Director, Radiology</p>	<p>Policies Superseded by this Policy:</p> <p>Initial effective date: January 5, 2009</p> <p>Review/Revision Date:</p> <p>Sept. 26, 2005 May 23, 2008 May 1, 2011 April 7, 2013 April 1, 2017 May 1, 2020 May 1, 2023</p> <p>Next review date:</p>
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CONTRAST EXTRAVASATION REPORT FORM

Patient Name: _____

Patient MRN: _____ Time: _____ Date: _____

Type of Contrast: _____ Volume extravasated: _____

Site of extravasation: _____

Gauge of needle: _____ Rate of infusion: _____

Technologist: _____

Symptoms/signs: _____

Treatment: _____

Plastic Surgery consulted: Yes/ No

Follow up: _____

The referring physician notified: Yes/No

If yes:

Name: _____

Pager: _____ Phone: _____

Time: _____ Date: _____

Signature of Radiologist: _____

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