Ruptured Abdominal Aortic Aneurysm (rAAA) Assessment, Consultation & Referral Guide

This guide is intended as a support tool to assist consultations with vascular specialist and/or transfer to a Vascular Centre for patients with moderate to high suspicion for ruptured AAA. The guide should be applied using clinical judgement.

Ruptured AAA is a surgical emergency. Consultation with a vascular specialist should be initiated **within 30 minutes of first medical contact with a patient suspected of rAAA.**

If vascular services are not available on-site, contact **CritiCall Ontario to facilitate ALL** rAAA consultations and potential referral to a Vascular Centre.

Time Goal:
≤ 30 minutes*
From first medical contact to CritiCall Ontario activation

≤ 30 minutes*

Clinical Presentation (Clinical Assessment Target Time ≤ 10 minutes*)

- ☐ Abdominal pain or back pain AND hypotension.[1, 2, 3] Proceed to POCUS or rapid radiologic assessment.
- ☐ Known AAA AND abdominal pain or back pain, hypotension, or impending cardiovascular collapse.[1, 2, 3] Proceed to rapid radiologic assessment IF it will not delay referral to a vascular specialist.

*If rAAA is considered as part of differential diagnosis based on clinical presentation, a rapid radiological assessment or POCUS must be completed to confirm or rule out presence of AAA.[1, 2, 3] If no CT/CTA on-site or CT/CTA is not immediately available, proceed with request for vascular consult if clinical presentation and ultrasound findings suggest presence of rAAA.

Rapid Radiologic Assessment: CTA (Rapid Radiologic Assessment Target Time ≤ 20 minutes*)

After-hours: Do not delay consult with vascular specialist for on-call technologists & radiologists. Do not transfer patient to other hospital for purpose of CT/CTA. Proceed to consult based on clinical presentation and POCUS.

- ☐ Abdominal and pelvic CT/CTA at 1mm cuts. CTA is preferred. Creatinine not necessary prior to CTA.
- ☐ Imaging should be automatically transferred to ENITS. If unable to transfer to ENITS a digital copy of imaging must be transferred with the patient.[1, 2, 3]

Consult with Vascular Specialist

Discussion with vascular specialist[1, 2] includes:

- ☐ CTA Imaging availability via ENITS/ local image repository or will be sent with patient[1, 2, 3]
- ☐ Goals of care[2]
- ☐ Medical comorbidities[2]
- ☐ Hemodynamics[2]
- ☐ Respiratory support

Phone
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1-800-668-4357

Immediate Clinical Management

- ☐ Intravenous access with two large bore peripheral IVs (central and/or arterial access not immediately necessary).[1, 2]
- ☐ Permissive hypotension (to maintain mental status and target systolic blood pressure of 70-90 mmHg).
- ☐ Blood products are preferred to treat hypotension.[1, 2, 3] Cross-match blood types if it will not delay patient transfer.
- ☐ Medication for pain.[2]
- ☐ Foley catheter placement may be considered if it will not delay transfer.
- ☐ Other actions that may help improve patient outcomes are patient warming[4] and avoidance of elective intubation.

Rapid Transfer

- ☐ Arrange immediate transfer. Cases confirmed Life or Limb[5], transportation will be arranged by CritiCall Ontario. Cases not confirmed Life or Limb[5], transportation arranged by referring hospital.
- ☐ Physician or nurse escort may be required as determined by referring physician.

Arrival at receiving hospital to intervention start
Time Goal ≤ 30 minutes*

Receiving Hospital

- ☐ Emergent evaluation and intervention by receiving vascular team

This information is for guidance only and is not a requirement.

*Time goals are not standards for medicolegal purposes. Times will vary based on patient presentation and other circumstances.

References:

1. Mell MW etal. Western Vascular Society Guidelines for Transfer of Patients with Ruptured AAA. J Vasc Surg 2017; 65:603-8.
2. Chaikof etal. The Society for Vascular Surgery practice guidelines on the care of patients with an abdominal aortic aneurysm. J Vasc Surg. 2018; 67:2-77.
3. Hinchliffe RJ etal. Transfer of patients with ruptured abdominal aortic aneurysm from general hospitals to specialist vascular centres: results of a Delphi consensus study. Emerg Med J 2013;30:483–486.
4. Spahn etal. Management of bleeding and coagulopathy following major trauma: an updated European guideline. Critical Care 2013; 17:R76.
5. Ontario Life or Limb Policy: http://www.health.gov.on.ca/en/pro/programs/criticalcare/life.aspx

Consult, transfer and repatriation of the patient is supported by the Ontario **Life or Limb policy**.

Final decision to transfer remains at the discretion of the referring and receiving physicians.

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