Adult Implanted/Tunneled Port and Catheter Removal

Ensure patient has been placed on antibiotics. If not, contact primary team.

Thrombosis (if port still needed and patient is asymptomatic start anticoagulation and do not remove port unless symptoms worsen)

Infection

Ensure anticoagulation medication ordered if presence of thrombosis. If not, contact primary team.

Communicate with vascular surgery provider on-call regarding location/position of clot to safely remove port

Is catheter safe to remove?

Proceed with closing site

Remove port or catheter, send tip for culture, leave wound pocket open, and pack with iodoform or gauze

Consult wound care, if needed

Ensure wound care appointment in place prior to discharge from infusion therapy clinic or inpatient area

Defer to vascular surgery for guidance to safely remove port

See Page 3 for Bleeding During Removal and/or Post-Port Removal Assessment

Coagulopathy Threshold

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Minimum platelet threshold</th>
<th>Threshold to infuse platelets during procedure</th>
<th>INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port catheter removal</td>
<td>20 K/microliter</td>
<td>10-20 K/microliter</td>
<td>2</td>
</tr>
<tr>
<td>Tunneled catheter removal</td>
<td>20 K/microliter</td>
<td>10-20 K/microliter</td>
<td>2</td>
</tr>
</tbody>
</table>

1 Heart rate greater than 110 bpm or less than 60 bpm, oxygen saturation less than 92% and systolic blood pressure less than 95 mmHg or greater than 170 mmHg

2 Refer to Peri-Procedure Management of Anticoagulants algorithm prior to procedure

3 No pain and/or swelling

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Note: This algorithm is intended to be used by the Acute Care Procedures Team.

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Department of Clinical Effectiveness V2
Approved by the Executive Committee of the Medical Staff on 10/30/2018
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**Port and catheter removal process**

- **Subclavian**
  - **Port older than 3 years?**
    - **Yes**
      - **If outpatient, refer to outpatient port clinic for removal by surgeon**
      - **If inpatient, consult vascular surgery for removal**
      - **APP may consider to attempt removal if patient prefers. Refer to Box A if unable to remove port.**
    - **No**
      - **Remove port**
      - **If unable to pull catheter, place hub back in port pocket and suture close. Consult Vascular Surgery for removal in the operating room.**

- **Internal jugular/femoral**
  - **Attempt removal regardless of age of port**
  - **If unable to pull out port catheter, place port hub back in port pocket and resuture. Consult Vascular Surgery for removal in the operating room.**

- **Tunneled**
  - **Confirm with patient and imaging history**
  - **Inspect for presence of second counter incision on abdomen or feel for cuff**
  - **Refer to Interventional Radiology**

- **Intraperitoneal**

- **Non-tunneled**
  - **Prior to attempt, contact surgical fellow on-call to ensure availability to troubleshoot if needed**
  - **Experienced Advanced Practice Provider (APP)\(^3\) to perform or assist in removal**

- **Tunneled central line catheter removal\(^2\)**
  - **Attempt removal**
  - **If unable to free tissue from cuff, utilize experienced APP\(^2\)**
  - **If unsuccessful, consult surgery fellow**

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\(^1\) Do not perform a catheter exchange utilizing a port-a-cath  
\(^2\) Patient must be supine for procedure  
\(^3\) APP with greater than 1 year experience in port removal

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**See Page 3 for Bleeding During Removal and/or Post-Port Removal Assessment**
Bleeding during port removal

- Hold pressure and immediately clamp bleeding tissue area with kelly or kocher clamp
- Place figure of eight stitch until hemostasis achieved
- Call surgery fellow if unable to control bleeding.
  Note: Please pay attention to other end of vein and ensure hemostasis achieved at both ends.

See Post Port Removal below

Post port removal

Review vital signs and assess wound for induration, erythema, fluctuance or drainage

Signs of infection?

Yes

- Consult surgical fellow for bedside evaluation
- Notify primary team

Surgical fellow and primary team conference to decide antibiotic treatment

Is patient unstable?

Yes

Consider referral to EC for admission and further work-up

No

- Discharge patient with oral antibiotics and have patient follow up with primary team
- Consult surgical fellow
- Notify primary team

Discuss with primary team to coordinate follow-up

Yes

No

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SUGGESTED READINGS


This practice consensus statement is based on majority opinion of the Acute Care Services Department at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

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