MANAGEMENT OF INFILTRATION / EXTRAVASATION OF INTRAVENOUS IRON THERAPY

Keywords: Iron infusion, extravasation, infiltration, iron therapy, ward 4 infusion unit

AIM

- To describe the appropriate management of a woman who has sustained infiltration / extravasation of intravenous (IV) iron therapy.

PROCEDURE

BACKGROUND

Paravenous leakage of all forms of IV iron therapy results in permanent skin pigmentation and may cause skin irritation thus it is imperative that the infusion is stopped immediately if infiltration/extravasation is suspected. Volumetric pumps will initially continue to flow until fluid accumulates in the subcutaneous tissues, thus careful observation and monitoring of the cannula insertion site is imperative.

Recognition of infiltration/extravasation

Table 1: Signs and symptoms of infiltration and extravasation

<table>
<thead>
<tr>
<th>Infiltration</th>
<th>Extravasation</th>
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<tbody>
<tr>
<td>Tenderness/discomfort at insertion site</td>
<td>As infiltration in addition:</td>
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<tr>
<td>Swelling above or below insertion site</td>
<td>Burning stinging pain</td>
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<tr>
<td>Taut skin above or below insertion site</td>
<td>Redness may occur followed by</td>
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<tr>
<td>Fluid leak at insertion site</td>
<td>blistering, tissue necrosis and ulceration</td>
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<td>Coolness/blanching around insertion site</td>
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<tr>
<td>Numbness or tingling above or below insertion site</td>
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MANAGEMENT OF THE INFILTRATION

1. Remove the cannula immediately and abandon the infusion.
2. Do not attempt to resite the infusion.
3. Reassure and provide a full explanation to the patient.
4. Assess and document the volume of infiltration by recording the volume of the infused fluid.
5. Inform the patients RMO so an assessment can be made of sensory deficit which could indicate nerve damage or compartment syndrome.
6. Further advice may be required from other specialities including Dermatology (skin staining), Plastic Surgery (sensory deficit) or Haematology (anaemia management) as per individual patient symptoms.
7. Apply a cold pack to the infiltrated site and elevate the affected limb.
8. If iron staining is immediately visible, measure the site and arrange for hospital photographs to be taken. This will aid ongoing monitoring of the patient.
10. Complete a clinical incident form.
11. The patient will be followed up as an out-patient where long term management will be discussed.
12. Laser therapy has been successful in reducing the skin staining long term.
MANAGEMENT OF EXTRAVASATION
If redness or blistering is apparent, then tissue necrosis can occur and management is aimed at limiting further tissue damage.

1. Remove the cannula immediately and abandon the infusion.
2. Do not attempt to reinsert the infusion.
3. Reassure and provide a full explanation to the patient.
4. Assess and document the volume of infiltration by recording the volume of the infused fluid.
5. Inform the patient's RMO so an assessment can be made of sensory deficit which could indicate nerve damage or compartment syndrome.
6. Hydrocortisone cream may relieve the irritation.
7. Further advice may be required from other specialties including Dermatology (skin staining), Plastic Surgery (ulceration or sensory deficit) or Haematology (anaemia management) as per individual patient symptoms.
8. Apply a cold pack to the infiltrated site and elevate the affected limb.
9. If redness, blistering or iron staining is immediately visible, measure the site and arrange for hospital photographs to be taken. This will aid ongoing monitoring of the patient.
11. Complete a clinical incident form.
12. The patient will be followed up as an out-patient where long term management will be discussed.
13. Laser therapy has been successful in reducing the skin staining long term.

REFERENCES / STANDARDS

National Standards – 1- Care Provided by the Clinical Workforce is Guided by Current Best Practice
1- Incident Management and Reporting
9- Recognising and Responding to Clinical Deterioration
7- Blood and Blood products treatment options

Legislation - Nil
Other related documents – Nil

RESPONSIBILITY
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Access the current version from the WNHS website.