REFERENCING A MIDLINE: HOW TO MAKE A CHOICE?

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BACKGROUND AND OBJECTIVE
Midlines, peripheral venous catheters, allow prolonged administration of intravenous therapy to patients with low venous capital. It is essential to test them to limit further misuse or complications as part of tendering procedure.

Objective: To assess two midlines to meet the expectations of medical teams and improve patient’s care.

MATERIALS AND METHODS

<table>
<thead>
<tr>
<th>Medical teams expectations</th>
<th>Referring a Midline</th>
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<tbody>
<tr>
<td>4 MONTHS OF TESTING: G1 then G2</td>
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Medical criteria: indications
- Catheter use duration (days), median [min; max]
  - G1: 7 [2-24]
  - G2: 15.5 [1-65]**

Handling criteria: opinions concerning:
- length of the catheter
- ease of installation
- preference (for G2 only compared to G1 if used previously)

Medical criteria: indications
- Parenteral nutrition (< 800 mosm/L)
- Extended antibiotic therapy (> 7 days)
- Change of dressing
- Clogged catheter
- Accidental withdrawal by the patient
- End of treatment
- Worse state of health
- Death

** context of palliative care

RESULTS

<table>
<thead>
<tr>
<th>PATIENTS AND INSTALLERS DATA</th>
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<tbody>
<tr>
<td>Patient characteristics</td>
</tr>
<tr>
<td>Number</td>
</tr>
<tr>
<td>Average age; 0 (years)</td>
</tr>
<tr>
<td>M/F gender ratio</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Installers Data</th>
<th>G1</th>
<th>G2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade, N (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anaesthetist</td>
<td>8 (94%)</td>
<td>8 (100%)</td>
</tr>
<tr>
<td>Surgeon</td>
<td>1 (6%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Successful insertion, N (%)</td>
<td>7 (70%)*</td>
<td>8 (100%)</td>
</tr>
</tbody>
</table>

** 3 failures on 2 patients (3 failures on the same patient) due to venous access difficulties.

Positive views (%)
- G1: 80%
- G2: 86%

Length of the catheter: 100% 33%
Ease of installation: 86% 67%

Most frequent comments:
For G1: “rigid guide”
For G2: “complexity of handling a peel-away sheath”

Among the installers who tested the 2 devices:
- G1: 80%
- G2: 20%

CONCLUSION AND RELEVANCE

The various patients clinical situations and the small number of patients made the medical criteria not relevant enough to be considered. Finally, it is handling criteria and practicality, as evaluated by caregivers, which led to the referencing of Smartmidline™ (G1).

To secure its use, a hygiene protocol is implemented already in the hospital. To facilitate the interface between hospital and community cares, instructions for patients, doctors and pharmacists have to be reinforced.