Results

1. Cardiovascular risk factor burdens were similar between groups.

2. The median halflife for dextran was significantly lower in trefoil treated patients (23 mins vs 56 mins for dextran-40; P < 0.001; Table1).

3. Despite a similar initial MES rate, the median time to MES resolution was 45 minutes longer in dextran-40 treated patients (Table 1).

4. Results were similar for subgroup on single antiplatelet treatment before surgery (figure 4) and for dual antiplatelet treatment before surgery (data not shown)

Table 1: MES decay rate after carotid endarterectomy in patients who received rescue antiplatelet therapy (trefoilin or dextran-40) for MES ≥ 50/ hr, for MES ≤ 50/ hr.

<table>
<thead>
<tr>
<th></th>
<th>Trefoilin</th>
<th>Dextran-40</th>
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</thead>
<tbody>
<tr>
<td>Time to MES resolution (minutes)</td>
<td>24 (20–30)**</td>
<td>33 (28–60)**</td>
</tr>
<tr>
<td>n (%)</td>
<td>88 (80–144)</td>
<td>95 (63–96)</td>
</tr>
<tr>
<td>P value</td>
<td>&lt; 0.001</td>
<td>&lt; 0.001</td>
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</tbody>
</table>

Table 2: Complications

- **TIA and stroke:** 1 (2%) vs 0 (0%)
- **Myocardial infarction:** 1 (2%) vs 0 (0%)
- **Death:** 1 (2%) vs 0 (0%) (MI, MI; MI, Mu, one case unknown, Renal failure)

Figure 4: MES rate after carotid endarterectomy between groups including those who developed early stroke (within 24 hrs) despite on dextran. All patients had single antiplatelet treatment before surgery (n=100)

Conclusions

- These findings suggest that TCD-directed trefoilin therapy is more effective than dextran-40 in rapid early suppression of cerebral microemboli after carotid surgery.
- Doppler detection of microembolization after carotid surgery provides a method to evaluate efficacy of antithrombotic agents.
- Despite the data of our study is observational we were able to compare patients with similar clinical profiles and our study showed a consistent result in both preoperative dual and single antiplatelet treatment. Further controlled trials that target spastic ischaemia and its clinical and cost-effectiveness of this treatment approach in patients refractory to conventional antiplatelet agents.

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