I sense something deeper…

Implantable Oxygen Sensors Are Here!

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"Si se puede" Feasibility Study: Overview

<table>
<thead>
<tr>
<th>Design</th>
<th>A prospective, observational, single-arm study of 10 threatened limb patients with planned revascularization procedure</th>
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<tbody>
<tr>
<td>Primary Endpoint</td>
<td>Characterize the feasibility of measuring tissue oxygen concentration using sensors placed in the lower limbs</td>
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<tr>
<td>Secondary Endpoint</td>
<td>Characterize the safety of sensor use</td>
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| Procedural Overview | - Pre-Op: Injected sensors at 3 locations on the lower limb, and 1 location on the upper arm, to collect baseline data 1-7 days before procedure  
- Intra-Op: Oxygen data were collected continuously during the procedure; the time of therapy deployment were recorded  
- Post-Op: Oxygen data were collected before hospital discharge and up to 28 days after procedure |

Case Study

Intra-Operative Data

![Graph showing intra-operative data with markers for red, green, and blue events corresponding to balloon inflation, balloon deflation, and stent deployment.]

![Box plots showing oxygen saturation levels at various time points: Preop, Postop, Week 1, Week 2, Week 3, Week 4, and Postop.]

![Graph showing QoC concentrations over time with markers for various time points: Preop, Postop, Week 1, Week 2, Week 3, and Week 4.]
• Sensors are safe in patients with threatened limb

• Sensors demonstrate differences in oxygen concentration pre and post endovascular therapy

• The time-response relationship demonstrates a trend toward quicker changes when dealing with distal disease (direct flow patterns)

• There's an urgent need to validate these procedures and set performance goals in a more objective manner

• Apart from posing itself as a future GPS for acute on-table decision making, the very stable nature of its oxygen sensing capabilities opens a door to a new era of follow-up.

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