

**ABSTRACT NO. : ABS3228****Perfusion index - a novel and objective parameter to predict successful lumbar sympathectomy: a case series.****Prateek Arora**

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**Background and Aims:** Lumbar sympathectomy interrupts the sympathetic system of the lower limb, thereby augmenting the flow in microcirculation. This block is assessed by resolution of symptoms, reduced nociception, decreased sweating, and rise of local temperature. Perfusion index(PI) can objectively predict a successful block. complex regional pain syndrome

**Methods:** The trend of perfusion index from the ipsilateral great toe of ten patients undergoing diagnostic lumbar sympathectomy for CRPS (6 patients) and peripheral vascular disease (4 patients), was observed and recorded using Mindray Beneview T8 monitor. The PI at zero and thirty minutes was plotted and the percentage of change was calculated.

**Results:** The trend and behaviour of perfusion index in all patients, irrespective of the chronicity and underlying pathology, was consistent. The rise in PI in the lower limb can be taken as an objective marker of a successful lumbar sympathectomy. Further controlled studies are needed to pin down an absolute percentage rise in PI to predict a successful blockade.

**Conclusion:** PI is a novel and promising parameter which is readily available in operating rooms and can objectively demonstrate a successful lumbar sympathectomy.

**Keywords:** Perfusion index, lumbosacral plexus, sympathectomy, complex regional pain syndrome

**References:**

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