

## Limaprost

### A Viewpoint by Akira Dezawa

Department of Orthopedic Surgery, Teikyo  
University Mizonokuchi Hospital,  
Kawasaki, Japan

OP-1206  $\alpha$ -CD (limaprost alfadex) is an orally active prostaglandin E<sub>1</sub> (PGE<sub>1</sub>) analogue that was approved in 1988 for the treatment of various ischaemic symptoms, such as ulcer, pain and sensation of coldness of the hands and feet, associated with thromboangiitis obliterans (TAO). In 2001, the indication of limaprost for improvement in pain and numbness in lower limbs and walking ability was expanded to include lumbar spinal canal stenosis (LSCS). Limaprost is a potent inhibitor of platelet aggregation as well as a strong vasodilator. Limaprost 30  $\mu$ g/day for TAO has a beneficial effect especially on relieving pain and healing ulcers. Of course, physical training in combination with drug treatment is a useful therapeutic option.

LSCS most commonly affects the middle-aged and elderly population and its main symptom is intermittent claudication. Such a narrowed spinal canal results in poor blood circulation of the cauda

equina, leading to a lack of nutrition in that area, and eventually results in neurological impairment. This causes pain and numbness in the lower limbs, which consequently lead to difficulty in walking (intermittent claudication). Surgical intervention cannot be recommended for all patients and LSCS is resistant to drug therapy, such as analgesics and anti-inflammatory drugs, as well as orthosis therapy and physiotherapy. Therefore, a multicentre, comparative, double-blind clinical study was performed for the purpose of investigating the efficacy, safety and usefulness of limaprost (15  $\mu$ g/day for 6 weeks) in LSCS.<sup>[1]</sup> Indeed, intravenous PGE<sub>1</sub> infusions in intermittent claudication are effective and well tolerated, but most patients would prefer to avoid an infusion as a first-line therapy. It is therefore expected that limaprost will be useful in improving the quality of life of patients suffering from ischaemic involvement by inducing remission of various symptoms. ▲

## Reference

1. Kurihara A, Kataoka O, Sugawara S, et al. Clinical benefit of OP-1206• $\alpha$ -CD on lumbar spinal canal stenosis: multi-center comparative double-blind clinical study [in Japanese]. *Rinsho Iyaku* 1996; 12 (3): 511-29