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Challenges faced in the clinical application of artificial anal sphincters

Key words: Fecal incontinence (FI), Artificial anal sphincter (AAS), Biomechanical compatibility, Smart materials

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Research Summary

This review mainly focused on the discussion of the crucial problem faced in the clinical application of artificial anal sphincters. The research content is as follows:

Problem

Fecal incontinence is an unresolved problem

Method

The clinical safety and efficacy of the artificial anal sphincters (including the FDA proved ACTION Neosphincter)are discussed and summarized.

Conclusion

We conclude that maintaining long term biomechanical compatibility between implants and their surrounding tissues is the key issue for achieving permanent continence in the human body.

The proposed method using smart materials in the device may improve biomechanical compatibility.


Thank you for your attention!
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