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HEAD AND NECK

VITOM-3D assisted neck dissection via a retroauricular approach (RAND-3D): a preclinical investigation in a cadaver lab

Dissezione laterocervicale mediante approccio retroauricolare assistito da sistema VITOM-3D (RAND-3D): studio preclinico in cadaver lab

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SUMMARY

Objective. The recent introduction of 3D exoscopic surgery has allowed interesting technical improvements in head and neck surgery resulting in technical solutions that are also applicable to neck dissection. The aim is to replace robotic surgery while minimising the costs of the procedure.

Methods. Based on these considerations, we conducted a preclinical investigation in the cadaver lab focused on approaching conventional neck dissection using a retroauricular incision, and evaluate the applications and usefulness of the Storz 3D Exoscopic System at different stages of the surgical procedure. The acronym RAND-3D (3D exoscopic surgery) was coined to describe the application of this optical tool in neck dissection.

Results. The current study in the cadaver lab indicates that RAND-3D is an acceptable alternative operating technique in performing neck dissection by a retroauricular approach. Technically feasible and safe, this technique assures a complete compartment-oriented dissection without damaging major vascular or nervous structures.

Conclusions. This approach can be used in selected cases with a clear cosmetic benefit and

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