An inexpensive model for teaching external dacryocystorhinostomy flap construction using a readily available Danish construction platform J. CP Roos

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Background: During external dacryocystorhinostomy, anterior and posterior flaps are fashioned and may be sutured in place. This tissue is friable and difficult to handle without damage and the sutures are performed at some depth from the skin. There are currently no good simulators to allow surgeons to gain experience prior to surgery.

Methods: We measured the dimensions of the surgical field and depth during dacryocystorhinostomy and modelled the contours of the cavity using surgical face masks and plastic building blocks (Lego).

Results: We created a model for flap construction which could be used repeatedly by exchanging the with successful. This is available free and can be copied by any surgical team without need for specialist equipment. We found the handling of the tissues and depth to be comparable to that experienced intraoperatively.

Conclusion: We have created an inexpensive aid for surgical practice for those wishing to improve surgical skills for external dacryocystorhinostomy.