

Evaluation of a helmet to hold an ultrasound probe

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A helmet has been designed and built to hold an ultrasound probe under the chin. The design has undergone several revisions after field trials. It fits a range of head sizes and probe sizes and is intended to hold the probe in a midsagittal position so that it is fixed relative to the cranium. Fixing it in this way allows tongue surface measurements to be made relative to the roof of the mouth. An evaluation of the helmet has been carried out using Vicon (a camera tracking system) in order to measure the movement of the helmet/probe with respect to the head during a normal recording session. The results of this evaluation will be presented along with feedback from users on the comfort and convenience of using the helmet for research studies.