

A study of the features of the Ambu Neuroline Cup Single patient EEG/EP electrode

SUMMARY

The objective of this study was to investigate the electric, mechanical and handling features of the Ambu Neuroline Cup, single patient EEG/EP electrode. The primary endpoint was signal quality, measured as the overall subjective evaluation of the signal by the technician or neurologist over time. The secondary endpoint was handling of the electrode, measured as the subjective evaluation of the application/handling of the electrode by the technician or neurologist.

The study was a non-comparative study conducted at Glostrup Amtssygehus (Denmark), Viborg Sygehus (Denmark) and Helsinki University Hospital (Finland). All three centres used the Ambu Neuroline Cup, single patient EEG/EP electrode for electroencephalography (EEG) or polysomnography (PSG).

A total of 113 patients (54% males and 46% females; mean age 45.2 years) were included at the 3 centres. All were valid for statistical analysis.

The mean time used for application of electrodes was 16.03 min, and the application was rated as easy or fairly easy in 91.8% of all cases.

Asked about signal quality, the test electrode was rated as better or as good as their usual electrode in 99% of



the examinations. In 92% of the examinations overall handling of the test electrode was rated as better or as good as their usual electrode. In 100% of the examinations the overall performance of the electrode was rated as very good/good.

CONCLUSION

In conclusion, the results of performance of this single use electrode show a very good and reliable electrode. In addition to that, there are inherent advantages of using single use electrodes. No after treatment (cleaning) of the electrodes is needed, there are no risks of cross infection and no worries about wear and tear. All together, the Ambu Neuroline Cup single patient electrode seems to offer considerable advantages to reusable electrodes for EEG/EP.

