

An Alternative to Collodion

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PRESENTER

My name is Esperanza Wagner and I am a board certified EEG technologist, Registry No. 93, since 1969. I graduated from the FIRST formal EEG course offered at the Mayo Clinic, Rochester, Minnesota in 1965.

In 2003, I began specializing in Epilepsy-related EEG and have worked at various Comprehensive Epilepsy Centers, including Westchester County Medical Center of Valhalla, NY, Presbyterian Hospital of Dallas, TX, Hoag Hospital of Newport Beach, CA, and Phoenix Children's Hospital, Phoenix, AZ.

PURPOSE

There are observable disadvantages to using Collodion.

Collodion causes skin breakdown.

Some patients are ALLERGIC to collodion.

Collodion is flammable and has a strong and unpleasant odor, requiring adequate ventilation.

Electrodes attached with collodion are removed with acetone, which can irritate the skin, especially when used on babies and patients in the ICU.

Collodion is difficult to remove, sometimes leaving residue on the patient's scalp, making them uncomfortable.

The purpose of this technique is to provide an alternative to doctors and techs who DO NOT want to use Collodion.

It will minimize patient discomfort and still provide a high-quality EEG recording.

METHOD

Clean and prep the skin.



Fill the electrode cup with conductive paste (Ten20® or Elifex®) - just enough to fill the cup.



Cut gauze into 2.5cm by 2.5cm squares. Squeeze a bit of electrode cream, like SAC2 Cream, onto the gauze squares.



METHOD (CONT'D)

Place electrode, then take gauze square...



...and apply it over the electrode, holding it down softly, at least ten seconds. (The cream dries quickly – serving as a glue.)



[NOTE: This method does not mix conductive creams, as there is VERY little contact between the two.]

Then wrap head...



And finish by covering the head with a net.



RESULTS/CONCLUSION

The electrodes remain secure on patients with severe seizures and behavioral disorders.

They have low impedance throughout and practically no repairs are needed during long-term EEG/video monitoring.

Electrodes are easily removed with water.

Patient feedback is positive and skin breakdown is avoided.

Collodion IS NOT NECESSARY for long-term EEG/video monitoring. This alternative produces a high-quality recording and is beneficial to the patient, especially those ALLERGIC to collodion. I have used this technique since 1996 on HUNDREDS of patients and have seen consistent results.

ONLINE REFERENCE/CONTACT

An online article describing this technique can be found at the website for Spes Medica USA.

espesmedicausa.com

For questions or comments, please feel free to reach out to me at: esperanzaw11@aol.com