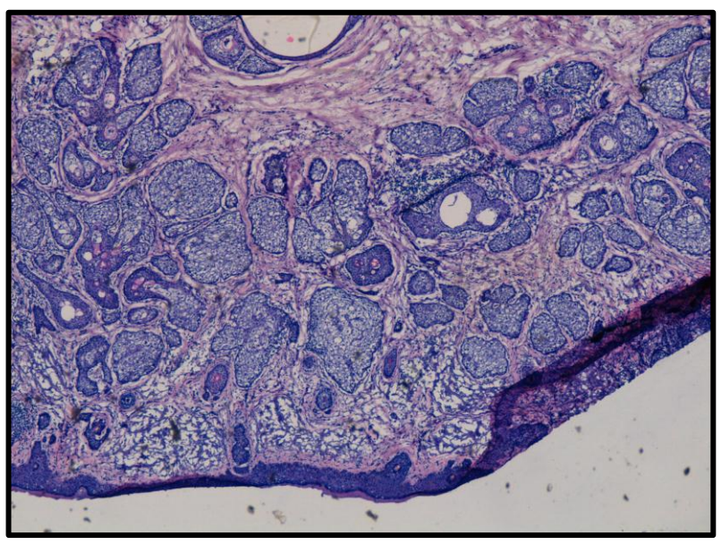
Freezing skin tissue in Mohs Micrographic Surgery using PrestoCHILL®.

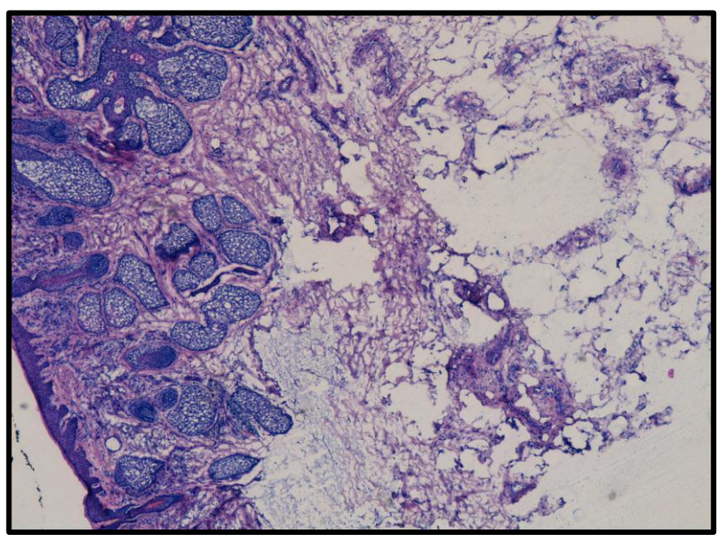
Veronica Caamaño Villaverde (1), Veronica Velasco Benito (1), Irati Allende Martixana (2), Izaskun Ocerin (2), Marta Mendieta Eckert (2). Cruces University Hospital; Department of pathology, Department of dermathology.

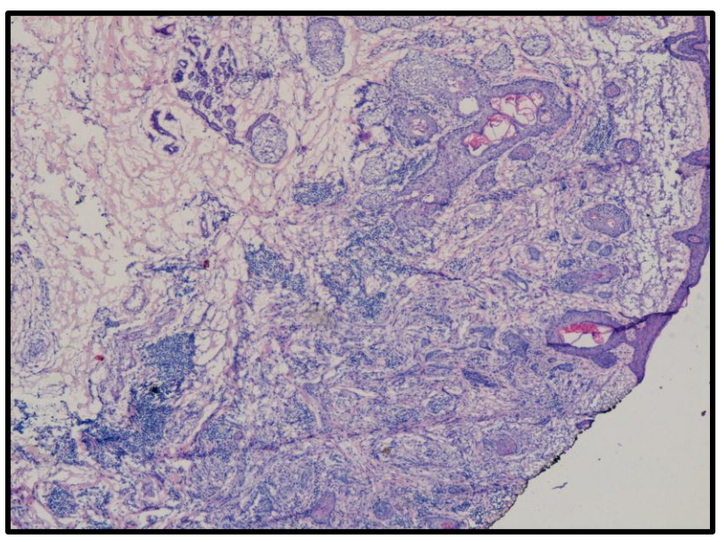
Background: Mohs micrographic surgery is distinguished by histologic examination of the complete surgical margin prepared from fresh frozen tissue. The purpose is to achieve the examination in one section of the undersurface, the sidewall, and the epidermal margin. To do so, the specimen must be manipulated before freezing, flattening it.

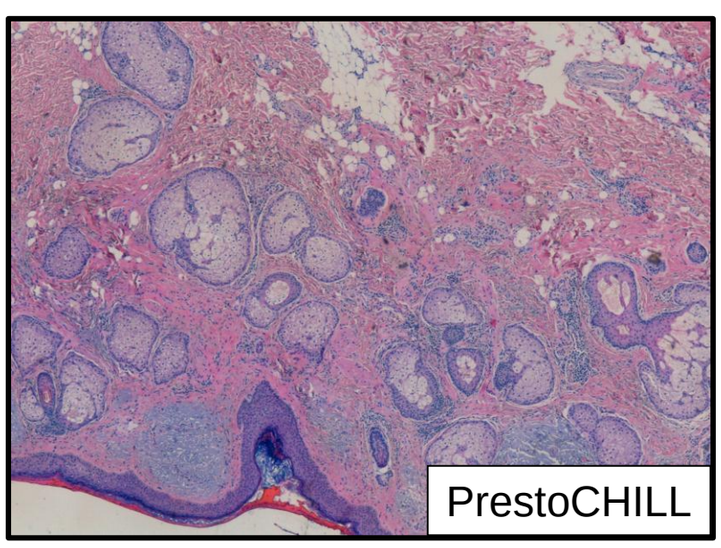
Design: We compare 34 cases frozen by traditional method over a year, with 9 cases frozen by PrestoCHILL® over 3 months.

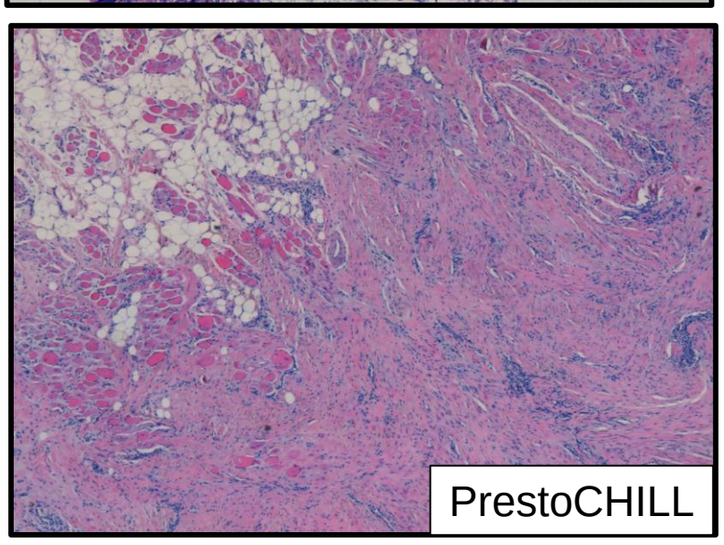
Results: Traditional method required a mean of 15 slides while the new one only 10. Also the number of frozen blocks needed downgraded from 1.9 to 1. Freezing quality was also improved, and holes and tears seen in fat were also reduced.

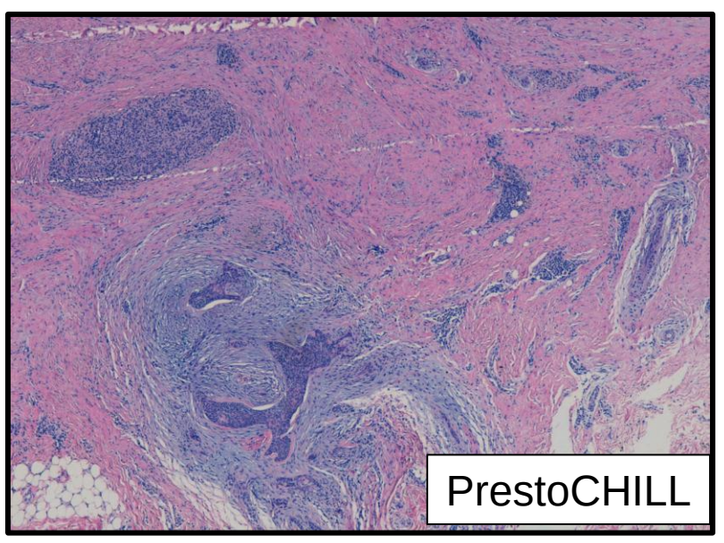












Conclusions:The manipulation of the skin while freezing is one of the pitfalls of this technique, since the flattening of tissue is done against gravity, and epidermal margins usually “fall”. The solution to this particular problem requires several serial sections or cutting the specimen in more than 1 frozen block to solve. We tested PrestoCHILL® device to freeze the tissue, since the freezing is made faster and in contact of a flat metal surface, facing the margin (favored by gravity).

“*Histologic Pitfalls in the Mohs Technique*” Navid Bouzari, MD, Suzanne Olbricht, MD, Dermatol Clin 29 (2011) 261–272

“*Hematoxylin and Eosin Tissue Stain in Mohs Micrographic Surgery: A Review*” Kassandra Larson, Pusjpa L, Anumolu and Minsue Chen. Dermatol Surg 2011;37:1–11

“*Setting up the Mohs Surgery Laboratory*”. Sharon L. Thornton, Barbara Beck HT. Dermatol Clin 29 (2011) 331–340

veronica.caamano.villaverde@osakidetza.eus

Osakidetza