
# ORAL PRESENTATION ABSTRACT

## 3.5. "P40 Sheet Plastination Technique. Protocols and Applications. Bibliographical Review with Systematic Search. Preliminary Communication". "Técnica de Plastinación de Cortes con P40. Protocolos y Aplicaciones. Revisión Bibliográfica con Búsqueda Sistemática. Comunicación Preliminar".

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**Introduction:** Sheet plastination with polyester resin was created initially for the preservation of brain slices. This technique has the characteristic of allowing an excellent contrast between the gray and white matter. Plastination was created by Prof. Gunther von Hagens, in Heidelberg, Germany, in 1977, and its fundamental characteristic is the application of a vacuum to cause the impregnation with resins of the specimens subjected to the technique. The polyester resin, created by von Hagens, was called P40, and gives the name to the same technique. The aim of this work was to review P40 sheet plastination technique, identifying the methods implemented by different authors to obtain plastinated sheets (2-4 mm) and determining their applications according to the tissue under study. **Material and method:** A literature search was carried out in Pubmed, Scopus and ScIELO, using the search algorithm: (Polyester resin OR P40) AND (Plastination). Articles related to the P40 plastination technique were included, without restriction by year or language. **Results:** After the search, 50 records were found (Pubmed, n:15; Scopus, n:30; Scielo, n:5). Finally, 28 articles were included in this review (after duplicates and unrelated articles were excluded). The information was ordered according to the subject investigated, such as protocols, anatomical regions, morphological comparison, among other applications. **Discussion:** The original P40 sheet plastination technique was patented in 1986 by Gunther von Hagens, which is considered the standard method. P40 plastination was applied to anatomical regions other than the brain, by various researchers, finding unique characteristics that allowed the use of this technique for other purposes, both in the field of education and research. Research was also oriented to the development of new resins, different from the original P40, allowing very good results to be obtained. **Conclusions:** Although it was initially created for the preservation of brain slices, later, various researchers began to apply this resin for the preservation of slices from other body regions. In this work we identify the characteristics of different applied methods, as well as the main advantages and disadvantages of this technique.

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