

Adipose tissue derived stem cells Células troncales derivadas del tejido adiposo

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In order to regenerate organs and functions has become known to the stem cells. Adult stem cells have the advantage that can be obtained from adult individuals without the ethical problems that brings the use of embryonic cells. Obtaining stem cells from adipose tissue (ASCs) has been a revolution because these cells can be obtained in large quantities with minimal discomfort and even with local anesthesia. Comparing the ASCs versus stem cells derived from bone marrow (BM-MSCs) their phenotypic characteristics and potential for differentiation are very similar. In this review we focus on the technique for obtaining ASCs, its molecular characteristics, their capacity for differentiation in mesodermal and no-mesodermal lineages, the most relevant preclinical and clinical trials executed at this time, as well as prospects for future use.