

Stem cells in human cranio-maxillo-facial reconstruction [Utilización de células troncales en reconstrucción cráneo-maxilo-facial en humanos]

Alister J.P.

Uribe F.

Alister F.

Fariña R.

Olate S.

The purpose of this study was to evaluate the evidence regarding the use of reconstructive techniques in the craniofacial area associated with the use of stem cells in humans. A systematic review of the literature was conducted in the databases Medline, ScienceDirect, EMBASE, TripDatabase, LILACS between March 2004 and March 2016 with eligibility criteria and defined search strategy. The selection of articles was done by two researchers independently and when they presented discordance, a third researcher made the selection. We found a total of 382 articles, made a selection of articles, removed duplicates, experimental studies in animals and selection according to analysis of abstracts, we selected 14 articles with reconstructive procedures in the craniofacial area associated with stem cells. There is limited quality evidence regarding the use of stem cells in the craniofacial reconstruction in humans. With the exception of one study (clinical trial of low level of evidence), all correspond to series or report of cases, with which it is not possible to recommend its use in reconstructive procedures. It is necessary to carry out studies of sustainable evidence with the use of stem cells that allow to identify its real performance when compared with other surgical techniques. © 2016, Universidad de la Frontera. All rights reserved.

Craniofacial surgery

Reconstruction

Stem cells

Tissue engineering