

Italians in “bone-growing” tests

Rome. A cell crucial to wound healing could be tweaked genetically to 'grow' bones in crippled patients, a group of Italian researchers say.

In a work published in Gene Therapy, Enrico Pola and his team from Universita' Cattolica in Rome show the formation of bone in "three experimental surgical models" on animals.

They say it could in future be used on patients who have suffered fractures or have other crippling ailments.

The technique used is to implant a genetically modified version of a fibroblast, a skin cell that helps wounds heal.

"We modify the fibroblasts with a gene we discovered in 2004, Lim Mineralisation Protein-3 (LMP3)," Pola said. "This genetic modification turns them into cells capable of spurring the formation of bone cells".

Pola said the lab tests, carried out in conjunction with Rome's Gemelli Hospital, had shown "very great efficiency".

It will take at least two years for the team to start experimenting on humans, Pola said.