INTRODUCTION
There is still no consensus on the definition of vascular necrosis of the proximal pole. Many studies refer to the presence of blood supply to diagnose AVPN by means of 
MRI, CT, CT, MR, histology or bleeding points at surgery, even if the absence of vascular supply is only an anatomical fact. 

In the literature, we find acceptable union rates in using interfragmentary screws for a non-vascularized bone graft (NVBG) of less than 10%.

There is a general consensus about the technical aspects of vascularized bone grafts, but there is a need for standardization.

OBJECTIVE

Head in combination with Core Decompression, and the great advantage of this tool is that it is less technically demanding, and the technique is able to provide a greater biological stimulus for the greater biological stimulus of the AVPN.

Generally, NVBG may be preferred as it is less technically demanding, and the technique is able to provide a greater biological stimulus for the greater biological stimulus of the AVPN.

METHODS

13 patients, between 18 and 30 years, with NAPN confirmed at surgery by the absence of bleeding points, with obvious need for vascular grafting detected by CTEB, have been treated through a minimally invasive vascular approach, characterized by - a vascular NVBG, a single or multiple vascular approach (only in case of chondral damage), harvested from distal radius, producing a metaphyseal core decompression - a stable fixation by means of an at least two Kirschner wires, after at least 3 months.

Technical details of Kirschner wires stable application in order to be left in situ even for many years without any functional limitation, are shown - an early biophysical stimulation therapy, for at least 3 months.

RESULTS

Radiological union was obtained in all patients with obvious proximal pole revascularization, detected by CBCT or MRI, with radiological revascularization of the scaphoid. Optimal ROM recovery was observed, even in cases of Kirschner wires still in place for more than 2 years.

In the literature, we find acceptable union rates in fixing the proximal pole with a NVBG, because of the presence of trabecular viability with tissue viability capable of redifferentiating activity. If the scaphoid non-union is properly stabilized together with fresh non-vascularized graft from radius and rigid fixation, the vascularized bone graft is seldom required to get union.

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REFERENCES


