F. Pipino

Regenerative medicine and tissue-sparing surgery

Published online: 5 March 2007

F. Pipino (☒)
Policlinico di Monza
Via Carlo Amati 111, I-20052 Monza, Italy
E-mail: f.pipino@libero.it

For 25 years, tissue-sparing surgery has influenced the indications for and techniques of orthopaedic surgery, especially in the field of hip and knee arthroplasty. Between 22 and 24 June 2006, a Consensus Conference was held in Rapallo (Italy) in order to officially define and codify this "surgical rationale". From this conference arose a series of lectures and discussions that granted a great scientific meaning to this "philosophy", this point of view that has conditioned the way many surgeons perform surgery.

The agreement from both basic science and orthopedic surgery has confirmed, by the exposition of the results, the rationale and the main features, as summarized in the "TSS Decalogue":

- 1. The prosthesis must integrate into the joint and not substitute it.
- 2. Maximum respect for anatomy.

- 3. Maximum restoration of joint biomechanics.
- 4. The surgical approach is selected respecting soft tissues and bone.
- 5. Blood loss is minimized.
- 6. Miniprostheses are used to maximize the conservation of bone-stock.
- 7. Dedicated instrumentaries are required.
- 8. Computer-assisted applications such as image analysis and virtual surgery are used.
- 9. The bone-prosthesis interaction is promoted by the application of growth factors (regenerative medicine).
- 10. Only pathological tissues are removed while healthy tissues are preserved.

The lectures presented in Rapallo, grouped according to the Decalogue's points, will be published in this journal. In this issue, we start with regenerative medicine as stated in point 9.