Clinical Evaluation of the
PLASMA SURGICAL PlasmaJet® Tissue Sealing System
in Orthopedic Surgery
Early Report

Pr. Philippe Merloz
Orthopedic Surgery Department
University Hospital, Grenoble, France

We have operated eight patients using the Plasma Surgical PlasmaJet® tissue sealing system. Of these 8 cases, 6 were spine surgeries (corrective surgeries for scoliosis or assimilated spinal deformations) and 2 arthroplasties (1 total hip and 1 total knee replacements).

The PlasmaJet® technology gave us entire satisfaction, in particular for large surface coagulation. This is particularly true in spine surgery but also applies to hip and knee arthroplasty. The PlasmaJet® pure plasma-based technology is perfectly efficient when optimizing the hemostasis at the level of the skin incision. It has also proven to be useful at the end of the surgery, particularly in knee arthroplasty once the pneumatic garrot has been released (after the knee implant is in place). The PlasmaJet® can also be used for bone hemostasis. Used in conjunction with Horsley bone wax, it stops the bleeding on bone resection planes rapidly and durably.

In spine surgery as in all other cases where we have used the PlasmaJet™, post-operative drainage (collected in Redon-type drains) appears to be reduced vs. what we usually observe after a surgery where conventional electrosurgery is used.

The PlasmaJet® handpieces are ergonomic and easy to use.