4. Omental Procedures

1) Omental Transposition

- Dr. Harry Goldsmith (Nevada, USA)
- Clifton
- Dr. Himanshu Bansal (India)

2) Omental Transplantation

- Dr. Carl Kao and Dr. Hernando Rafael (Mexico)
- Dr. Georgie Stepanov (Moscow)

Dr. Himanshu Bansal (India) and colleagues have incorporated Goldsmith’s omental transposition ideas into their growing therapeutic armamentarium for acute SCI. Specifically, they have placed a fluid-absorbing omental pedicle over the exposed cord of several individuals with thoracic injuries. Because the cord was lacerated in these injuries, decompression was not required as is often the case with contusion injuries. Although recognizing it is difficult to assess treatment-related improvements in the acute-injury phase, Bansal will attempt to get insights on effectiveness by comparing treated patients with untreated individuals with comparable injuries. He will also carry out various follow-up tests six months afterwards, including neurological assessments, evaluation of injury-site MRI's, and electrophysiological measurements of nerve conduction. Bansal intends to perform these omental transplantation procedures on more patients in the future. The timing of his procedures will depend upon the nature of the injury as determined by MRI assessments: 1) pure contusion, 2) less than 50% of the cord lacerated, 3) more than 50% but not all of the cord lacerated, and 4) complete transection of the cord. For example, in the case of pure contusion injuries, he intends to carry out decompression and transpose the omentum immediately after injury; with lacerative injuries, he will wait several weeks.

2) Omental Transplantation: Many others have used omental transplantation, not transposition, including Dr. Carl Kao and Dr. Hernando Rafael (Mexico). As reported at the 2001 WHO-sponsored conference held in Reyjavik, Iceland (Spinal Cord 39 2001), Rafael grafts an unattached piece of omental tissue over the injured cord and connects it to a surrounding vascular source. At the time of the conference, he had treated 232 patients with traumatic SCI with the procedure. He claimed that 43 percent have neurologically improved, including 43 who are walking with or without the use of orthopedic devices.

Somewhat similar omental transplantation procedures were reported by Moscow’s Dr. Georgie Stepanov.