**Introduction**

A complete range of instruments to face any possible situation during a hand transplantation procedure is mandatory. The material and instruments needed for hand transplantation should be carefully selected and prepared in advance. Their division into practical and ready-to-use sets is essential in a scenario where wasting time must be minimised. Our list of instruments and materials as well as the additional items to be used in the operating theatre is as follows:

- Surgical instruments trays
- Suture stitches tray
- One table with sterile sheets
- Two tables, one of which prepared with a tray for harvesting an iliac crest bone graft
- Two squared tables: one for the osteosynthesis set; one for the harvested limb (including iced solution)
- Operating microscope with videocamera and monitor
- Portable image intensifier.

**A. Surgical instruments trays:**
- Two basic hand trays
- One iliac crest bone graft tray
- One bone tray
- One tendon tray
- One microsurgical tray.

**B. Additional individually stored instruments/items:**
- One power drill
- One saw blade (size 1-2-3)
- One electric dermatome + blade + 10-cc syringe with Vaseline
- Two Lambottes, large size
- Two bowls, large and medium size
- One basin
- One preset colour-tagged mosquito for each individual flexor/extensor tendon (Fig. 1).

**Fig. 1.** Preset coloured tags for each individual flexor/extensor tendon
- Two Kilner skin retractors, double ended, medium size
- Two Kilner skin retractors, double ended, large size
- One lead hand
- One osteosynthesis (forearm) set
- One elastic bandage (Esmarch).

C. Complementary items:
- Six scalpel blades, no. 15
- One beaver scalpel blade
- Two marking pens
- One electric scalpel
- Various towels TNT repellent
- One operating microscope towel
- Bone wax
- Aspirator
- Cannulated needles of various sizes
- One 20-cc syringe with local anaesthetic and adrenalin 1% (for skin preparation in iliac crest bone graft harvesting)
- One hypodermic needle
- Four 10-cc syringes: two with NaCl 0.9%, one with heparin, one with local anaesthetic
- Suction drains
- Silicon drains
- Skin stapler, small and medium size
- Tapes of various sizes
- Three plaster splints, sponge-cloth and elastic bandages.

D. Sutures (Fig. 2):
- Subcutaneous and muscles:
  Polysorb 1/0, 2/0; Monocryl 3/0, 4/0
- Skin: Dafilon or Ethilon 3/0, 4/0
- Ligaments: Ethibond 3/0
- Flexor tendons: Ti-Cron 3/0, 4/0; Prolene 4/0, 5/0
- Extensor tendons: Prolene 4/0, 6/0
- Microsurgery: Ethilon or Monosoft 8/0, 9/0
- Safil loops: 3/0

Fig. 2. Sutures: 1 Monocryl 3/0, 4/0; 2 Ethilon 8/0, 9/0; 3 Ti-Cron 3/0, 4/0; 4 Polysorb 1/0, 2/0; 5 Ethibond 3/0; 6 Safil 3/0; 7 Dafilon 3/0, 4/0; 8 Prolene 4/0, 5/0, 6/0