

## SUPPLEMENTAL DIGITAL CONTENT 1

### Detailed Hypnosedation Procedure

Patients were positioned on a smooth foam mattress. Hypnotic trance was induced by eye fixation. Throughout the trance, instructions were repeated: “lachez prise” (the French translation of “let go”), “faites confiance en vous-même” (trust yourself), “profitez des instants” (enjoy the moment).

At the beginning of the trance, the patients had to *separate the mind and the body and to maintain a distance of 2 cm between them*. They were told that *their unconscious was involved, that splitting the mind and the body would highlight the connections that usually join them, and that they should separate them*. During this exercise, they were asked to *fold these connections in three and place them in their right foot; this would protect the body and place it under the control of the unconscious; in this way the body was safe*. A peripheral venous catheter and an arterial radial catheter were then inserted, and the metaphor of an insect flying and gathering nectar was suggested, after which Remifentanyl 1 ng/ml was continuously infused (with a target control infusion mode, which potentialized the hypnotic trance). Boli of Propofol 10 mg were performed when the patients experienced a difficult time, which allowed the patients to easily “let go” without modifying consciousness: the patients continued to hear the voice of the hypnotherapist. A bladder catheter was then inserted, with the metaphor of a coloured energy with heat in the lower body. To enter the hypnotic trance more deeply, the patients were asked to *increase the distance between the mind and the body to four cm, and to fold the new connections in four and place them in their right foot*.

The patients were then positioned in lateral decubitus while continuing to use the metaphor of coloured and warm energy.

When the Mayfield head clamp was placed, the metaphor of energy was used again. Briefly, patients were told that this energy was *circulating along the spine to form a sphere around the back of the neck*, and they were encouraged to *let their mind float above and around their body at a distance of six cm*. The last connections appearing between the mind and the body had to be *folded very carefully in six, and separated from the others*. Next, the sphere of energy had to be divided into *three other spheres that had to be placed around the skull*. During this

*displacement, the three spheres changed colour and temperature.* When the spheres had been established around the skull, the Mayfield clamp pin sites were infiltrated with Lidocain. When the head clamp was placed, the patients were warned that they would feel pressure. To add a sense of mystery, *three mystic cardinal points* were described. The cranial nerves (supraorbital, temporal, auricular and occipital) were blocked with ropivacain and the incision was infiltrated with Lidocain mixed with saline serum 0.9%, while the metaphor of a *migration of energy to build connections between the three cardinal points* was suggested.

During the placement of the operating fields and skin incision, the hypnosis focused on relaxation. A series of words was repeated “*poser, composer, decomposer*” (“put down, put together, break down”), or a series of random numbers. During the burr hole drilling and saw cutting (bone flap), the patients were asked to imagine a vibrating device, for example they were on a bicycle with triangular or square wheels. While the bone flap was being lifted, the patients were instructed to cough.

The trance ended during the opening of the dura mater. A new phase of relaxation was induced and the metaphor of the mind separated from the body was used again, but this time to bring the mind back into the body to end the trance. The patients then returned to full consciousness.