



## **RANDOMIZED DOUBLE BLIND STUDY ABOUT EFFICIENCY OF NEGATIVE PRESSURE MASSAGE ON ABDOMEN (LPG® TECHNIQUE) OF PATIENTS WITH A FUNCTIONAL INTESTINAL DISORDER (FID)**

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### **Aim**

To determine the effect on pain & abdomen meteorism, of a technique of negative pressure massage (LPG® technique) practiced on abdomen and back wall. The hypothesis is that massages decrease colon pain by stimulating the sensitive big-diameter afferents which innervate the abdomen and back walls, and by involving the posterior medullary gate control.

### **Method**

32 patients with FID have been enrolled in 2 centers. After randomization, 16 patients (51years, range 31-70) have got an active massage (8 in each center) and 16 patients have got a non-active one (placebo) (55 ans, range 23-79) (8 in each center). The massage has been done during 25 minutes with one week in the mean time, The massage was standardized. The massages have been delivered until the symptoms disappear and to a maximum of 10 sessions. The assessment (visual analogical scale VAS) of pain and meteorism has been done by another operator than the one practicing the massage and the randomisation, before and after the sessions.

### **Results**

The variance analysis (Anova) shown a significant decrease of the score VAS for pain ( $p = 7.10^{-5}$ ) and meteorism ( $p=0.01$ ) on patients treated by an active massage compared to the ones treated by a placebo, independently of any center. Although the randomization well-balanced in each center, patients treated by an active massage had a previous score of pain which was significantly over when compared with the one from placebo-treated patients ( $p=0.02$ )

### **Conclusion**

The negative pressure massage decreases significantly the abdomen meteorism on patients affected with a FID. Due to a selection bias on patients with pain, it was not possible to conclude about the abdominal pain.

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