# LONGITUDINAL ANALYSIS OF THE APPLICATION OF THE THERASUIT METHODOLOGY AS A PROGRAM OF INTENSIVE PHYSIOTHERAPY FOR PATIENTS WITH CEREBRAL PALSY AND BIFIDA SPINA



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Figure 1: Componets of TheraSuit Method

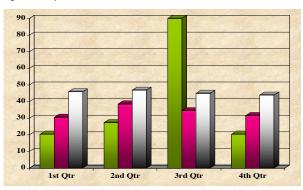


Figure 2: Results...

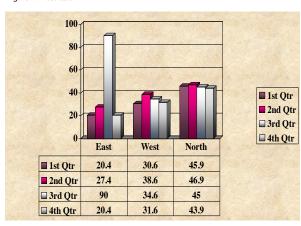


Figure 3: Results...





Figure 4: Videos - qualitative results before & after

### **ABSTRACT**

The study analyzed the perpetuation of the functional gains provided by TheraSuit Method Intensive Rehabilitation Programs including ten patients with diagnosis of CP/Spina Bifida aged from 3 to 18 years old. The research methodology used was Non-Randomized Clinical Study. The analysis was performed on a history of 4 to 12 consecutives programs of the longitudinal studies of functional motor gains in a period of 3 years.

## **METHODS**

All the participants were evaluated according to the GMFM-66 protocol, before and after participating in the intensive program. The program was composed of three hours per day session, five days a week for four weeks total. The treatment followed the TheraSuit Methodology, using the Suit and the UEU (Universal exercise unit – Cage including the Spider and Pulleys System). This procedure was repeated in four annual modules, with minimum intervals of five weeks and maximums of sixteen weeks.

#### **RESULTS**

The GMFM-66 scores obtained over 3 years of application of the TheraSuit Method were distributed per patient according to their GMFCS level. After the analyzes, the average gain was: GMFCS II (2 patients) 25.4 points; GMFCS III (1 patient) 9 points; GMFCS IV (4 patients) 9.58 points and GMFCS V (3 patients) 5.99 points.

#### **CONCLUSIONS**

The results indicate that the application of the intensive treatment using the TheraSuit Method produced an increase of the GMFM-66 score in the first year with a minimum value in points of 3.11 and average value of 11.74. In the second year produced an improvement of minimum value of 11 points and average value of 15.9. and in the third year produced an improvement of 9.3 and average value of 9.9. According to Hong 2017, gains above 4 points are considered a clinically significant change. The three-year longitudinal analysis showed that continuity of treatment leads to increases in functional gains, with no case of regression to pretreatment baseline levels, indicating a perpetuation of treatment gain.

# REFERENCES

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