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► To cite this version:

Vania Cristina Reis Miranda, José Elias Tomazini, Marcelo Sampaio Martins, Guillaume Thomann. Evaluation of balance with test of strategies of balance on a force platform. Congresso Internacional de Fisioterapia Manual, Apr 2014, Joao Pessoa, Brazil. 2014. hal-01101141

HAL Id: hal-01101141

<https://hal.science/hal-01101141>

Submitted on 7 Jan 2015

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EVALUATION OF BALANCE WITH TEST OF STRATEGIES OF BALANCE ON A FORCE PLATFORM

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INTRODUCTION

The evaluation of the Balance strategy :
 - tests are easy to use and of low cost
 - the results are mostly subjective

Research study of the correlation with the Posturography measurements which are more objectives

Building of a personal platform to verify the correlation

OBJECTIVE

To design and to build custom platform

To evaluate and to compare the displacement of the center of pressure (CP) of a healthy individual with an individual diagnosed with disease Ménière through the force platform

To correlate reactive strategies postural balance with data of center of pressure and kinemetry

MATERIALS AND METHODS

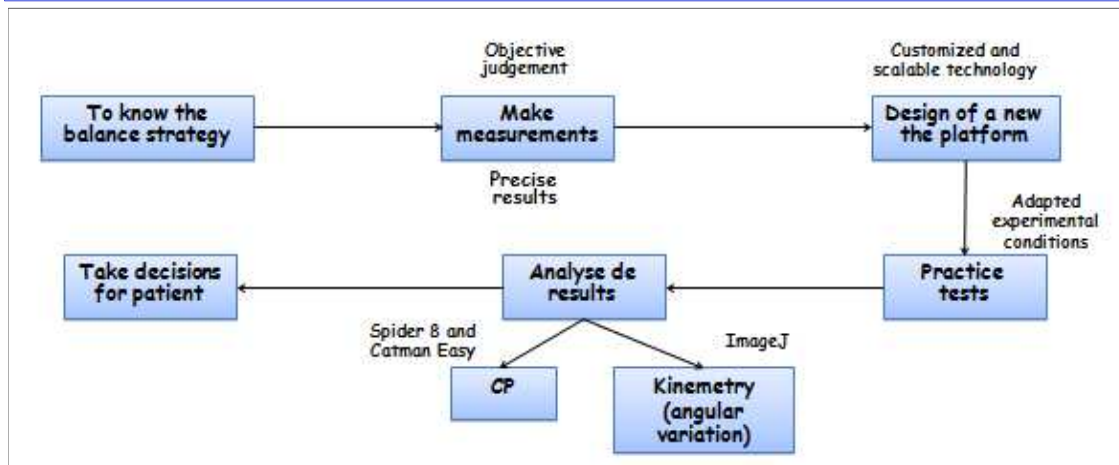
Volunteers: male of 34 years old and healthy and male of 54 years old diagnosed as Ménière Disease

Test of reactive balance strategies (SHUMWAY-COOK, WOOLLACOTT, 1995)

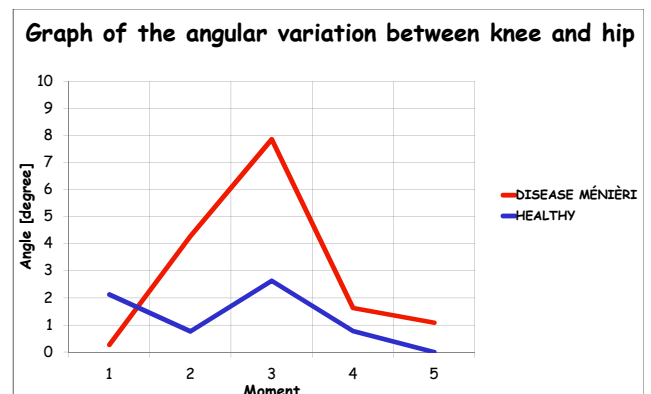
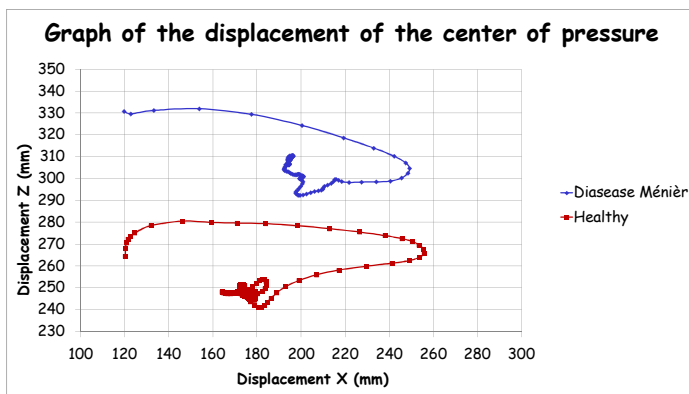
Force platform built in the laboratory of Biomechanics FEG/UNESP (figure 1), Spide 8 and Catman Easy equipments to control the data.



Figure 1 - Force platform



RESULTS



CONCLUSIONS

These results suggests that the voluntary bearer of Ménière Disease used an abnormal strategy of balance in order to keep the displacement of the center of pressure within his base of support, and that the healthy voluntary used the normal strategy.

A wider study is necessary to achieve more consistent data, however it is already possible to draw a line of reasoning about the investigation. Other field tests will also be performed in order to verify the sensorial systems of more dependency and of less effectiveness for the maintenance of postural balance.

Diapositive 1

JET3 Não faltou setas
(elementos de ligação
entre os quadros ??)

José Elias Tomazini;
27/04/2014