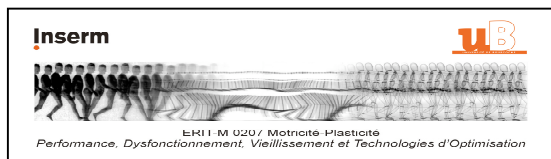


# VERTICAL HETEROPHORIA AND POSTURAL DEFICIENCY SYNDROME (PDS)

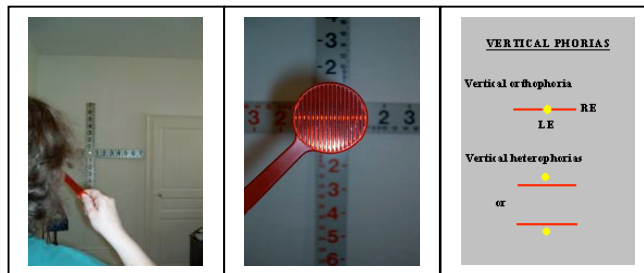
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## Qualitative evaluation of vertical phorias

The subject stands erect, 5 meters in front of a point of light, in an anatomically referenced position (fig. 1). Maddox's rod (fig. 2), with its stripes running vertically, is placed in front of the right eye, transforming this point into a red horizontal line, and the left eye then 'positions' the light point – on, over or under – the red line (fig. 3).



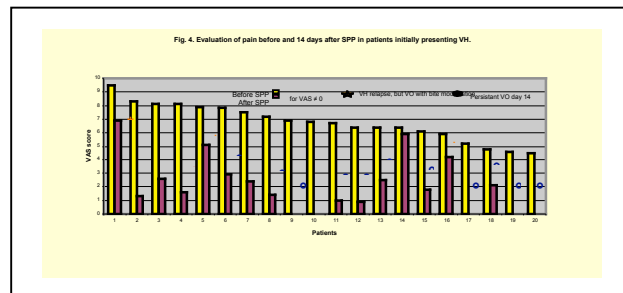
## Vertical heterophorias and their normalization

Vertical heterophoria (VH) was observed in 114 of 179 candidates for rehabilitation. Strict vertical orthophoria (VO) was immediately restored for 103 (90%) of them by application of specific proprioceptive physiotherapy (SPP) of 3 non-interchangeable, but sometimes complementary, zones – oropharynx (13% of the patients), temporomandibular joint (80%) and/or pelvis (45%). With VO normalization, we observed pain reduction but could not evaluate it. [1]

## SPP impact on Da Cunha's PDS

SPP treatment of VH, manifesting as chronic pain for which the physiotherapy evaluation was suggestive of PDS, reestablished VO for 75% of the patients in a randomized study and was associated with:

- clear pain diminution, assessed with a 10-point visual analog scale (VAS) (fig. 4) [2], and
- normalization of qualitative clinical test results for equilibrium, spinal and peripheral joint mobility, remaining to be precisely evaluated [2] (see photos).



When VH persisted despite SPP (25% of the cases), we noted that PDS persistence could be attributed to :

- a dental occlusion dysfunction, when a bite modification restored VO, or
- a visual input disorder. In this case, when the subject kept his/her eyes closed for 30 seconds, the results of the different clinical tests conducted with the eyes closed also became normalized. The same, sustained effect was obtained by applying pressure to the reflexed tendon of the obliquus superior (eye) muscles, and was accompanied by immediate pain relief, with the VAS score declining 3.7–5.3 points.



## Conclusion

Qualitative VH detection and its response to SPP represent a simple and rapid way to detect and treat the perturbations susceptible of causing and/or maintaining PDS.

## References

- [1] Matheron E. In Lacour M, (Ed.), *Posture et équilibre*, Solal, Marseille, 2001, 157-163.  
[2] Matheron E, Barlaud P, d'Athis P. *Journées de posturologie APE-API*, Paris January 2004, in press