TETRAX

Tetrax – An Invaluable Aid for the Physician

Clinical Uses of the Tetrax System

Clinical studies have shown that the Tetrax system assesses balance and stability accurately and reliably. Its detailed result parameters have exhibited utility in a number of different situations.

The Tetrax system has been shown to provide valuable information to the physician to confirm his clinical impressions or suspicions, and therefore helps to focus the clinical examinations given to the patient, limiting unnecessary tests. It also offers the possibility of systematic follow-up, used to test the effects of therapeutic interventions.

The Tetrax system has been successfully used for all of the following conditions:

- The Tetrax system is an important ancillary diagnostic tool in two major clinical groups: vertigo and dizziness[1], and lower back problems.[2]
- The Tetrax system can be used as a convenient screening device in normal and marginally pathological populations to test the risk of falling and the effects of fatigue, stress, or intoxication.
- The Tetrax system provides valuable information on the effects of prosthetic devices, including prostheses, splints, corsets, etc.
- The Tetrax system is highly applicable in the field of child psychology and developmental pediatrics, where the links between cognitive, mental, and overall physical development and postural control can be tested.

Thus, Tetrax offers a wide range of applications as a screening device in preventive medicine, industrial medicine, pediatrics, school psychology, as well as in the field of accident prevention, insurance policy, etc.

Specificity and Sensitivity

The Sensitivity of the Tetrax System has been demonstrated by its ability to detect subtle signs of pathology undetected by routine clinical tests or examinations. In addition, the Tetrax system may reveal still existing balance problems in patients up to five years after injury (mainly whiplash), while all other clinical examinations might show negative results. The implications of such findings in the context of medico-legal controversies are evident.

Sunlight

The Specificity of Tetrax has been documented in an array of studies, enabling the differentiation between various clinical groups, as detailed below:

- Women with osteoporosis and women not suffering from osteoporosis[3]
- Subjects who have fallen in the past vs. subjects who have not sustained falls[4]
- Subjects suffering from balance disorders due to dysfunction of the inner ear vs. balance disorders due to brain damage.[5,6]
- Subjects suffering from autism vs. severe communication disorders due to traumatic events or infectious disease[7,8]
- Subjects suffering from learning problems linked with genuine dyslexia vs. those due to socio-cultural neglect[9,10,11]
- Subjects suffering from cervical disorders caused by injury vs. those due to a degenerative process.[12]

In addition to the high sensitivity and specificity of the Tetrax System in the context of the clinical studies described above, the device has been shown to detect differences of postural responses within normally functioning populations.[13,14,15,16,17]

Therefore, the system is a valuable tool for patients suffering from balance problems and for treatment monitoring, as well as in screening the general population for undetected and imminent health issues.

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