

# R5: Vestibular and Balance Assessment in Post Chemotherapy Pediatric Patients: Preliminary Study

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## ABSTRACT

**Introduction:** Platinum based chemotherapy drugs used in most childhood cancer treatment is well known for their ototoxicity effect. However, the effect of these drugs towards human's vestibular system is under reported. This preliminary study explores the potential uses of ocular and cervical vestibular evoked myogenic potential (oVEMPs and cVEMPs), and video Head Impulse Test (vHIT) to objectively quantify the function of the vestibular peripheral organs. Additional to the above, overall patients' body balance were assessed using the gross motor subset of Bruininks Oseretsky Test of Motor Proficiency II (BOT-2). **Methods:** Thirteen patients (mean age 14.37 ± 5.83 years) who underwent treatment with platinum based chemotherapy drugs participated in the study. Twenty-three healthy controls (mean age 11.93 ± 3.55 years) with normal hearing and no history of vestibular and balance problem served as controls. **Results:** The oVEMPs, cVEMPs, and vHIT results showed no significant difference (p>0.05) between the post chemotherapy and control healthy groups. However, there is statistically significant difference (p<0.05) in the BOT-2 gross motor subset score, where the post chemotherapy group scored lower than the control healthy group. **Conclusion:** The results obtained suggested that post-chemotherapy pediatric patients have significantly poorer body balance, but at the same time their peripheral vestibular organs are not significantly affected.

## KEY WORDS:

*Vestibular and balance assessment on pediatrics; post chemotherapy; vestibulotoxic*

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# R6: Perspective Regarding Pain and Fear-avoidance Belief in Adults with Chronic Non-specific Low Back Pain- A Qualitative Study

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## ABSTRACT

**Introduction:** Chronic non-specific low back pain (CNSLBP) is associated with fear-avoidance belief. The aim of this study was to explore the perspectives of pain and fear-avoidance belief and its related issue such as coping strategies among adults with CNSLBP. **Methods:** One to one interview using semi structured questions was conducted among eight CNSLBP adults (2 males and 6 females) aged 20 to 45 years (m=33.5±5.953). **Results:** Three main issues were identified from the results that consisted of experiences of pain, coping strategies and fear-avoidance belief. Most participants reported that they commonly avoided sports and social activities due to fear of pain. The findings of this study also suggested that pain experiences and coping strategies may influence fear-avoidance belief in adults with CNSLBP. **Conclusion:** Health practitioners need to provide awareness, education and reassurance to facilitate reengagement with sporting and social activities among adults with CNSLBP. Current literature evidence indicates that returning to activities can play an important role in the management of CNSLBP.

## KEY WORDS:

*Pain, activity avoidance, fear-avoidance belief, coping strategies, Chronic non-specific low back pain*