

T18.3

Collaborative Service Programmes in Allied Health

14:30 Room 423 &amp; 424

**New Advancement in Vestibular Evaluation and Rehabilitation**

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Patients with vestibular dysfunctions usually present with vertigo and visual disturbance. This may lead to impaired balance and unsteady gait, which result in falls. Evidence showed that these patients have a 12-fold increased odds of falling. Sufferers may also experience psychological distress such as anxiety, and may develop phobic avoidance of movements. Therefore, prompt evaluation of vestibular function and provision of effective vestibular rehabilitation are of upmost importance to reduce patient's vertigo and related symptoms, optimize vestibular function, improve balance ability, and hence restore their quality of life.

Vestibular rehabilitation has been proven as a safe and effective treatment for managing vestibular dysfunctions and related symptoms. With the emerging evidence supports and the technological advancement related to vestibular rehabilitation in recent decades, physiotherapists incorporate up-to-date technology and evidence-based practice to vestibular evaluation and rehabilitation regime for vestibular dysfunctions. By performing precise and objective evaluation on vestibulocular functions, and multidimensional factors associated with balance disorders, physiotherapists target custom-made rehabilitation programme to patients with vestibular dysfunctions. Physiotherapists make use of video oculography for oculomotor assessment and specific positioning test for benign paroxysmal positional vertigo (BPPV). Moreover, Computerised Dynamic Visual Acuity test is used to assess the function of vestibular ocular reflex (VOR), whereas Computerised Dynamic Posturography is commonly used for evaluating the integrated use of visual, somatosensory, and vestibular inputs for balance system. Also, the impacts of vestibular disorder on patients' functional performance are evaluated by validated assessment tools, such as Chinese Dizziness Handicap Inventory (C-DHI). According to qualitative and quantitative assessment results, physiotherapist can then formulate customised vestibular rehabilitation regime for attaining the goal of adaptation, habituation and substitution for the vestibular system. Specific repositioning maneuvers and exercise will be prescribed for managing those with BPPV.

Promising results of vestibular rehabilitation service rely on detailed evaluation and rehabilitation planning, as well as closely collaboration with ENT specialists, neurologist and audiologist. With joint effort, quality vestibular rehabilitation service for patients with vestibular dysfunctions is guaranteed.