

# The Intense Musculoskeletal, Functional Performance and Cardiometabolic Training (IMPACT) Exercise Intervention in Postmenopausal Singaporean Women: A Pilot Study assessing Feasibility, Safety and Acceptability

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## ABSTRACT

**Introduction:** Menopause predisposes women to low bone mass and increased cardio-metabolic risk. Pharmacological interventions have both troublesome and serious effects. Exercise can reverse bone mass and muscle strength loss, but the evidence is conflicting. The “best” exercise is unclear. **Objectives:** The Intense Musculoskeletal, Functional Performance and Cardiometabolic Training (IMPACT) pilot assessed its feasibility in terms of feasibility, safety and acceptability. **Methods:** Postmenopausal osteopenic/osteoporotic women aged between 50 and 64 who fulfilled the strict inclusion criteria were recruited from Menopause clinics. Participants attended four weeks of twice-weekly, supervised 45-minute sessions comprising resistance training and impact loading exercises. Three sessions of lifestyle coaching were included. At baseline and completion, functional performance, anthropometrics, grip strength, physical activity tracking, spine X-ray and bone mineral density measurements were performed. Validated questionnaires assessed demographics, health status, physical activity, self-management of health and quality of life indices. **Results:** 30/251 women screened eligible due to strict inclusion/exclusion criteria. Six were recruited between March to August 2018. All completed, complying with the study protocol. Participants achieved 98% attendance. Mean age and menopausal age were 57.9 and 48 years, respectively. Majority (83%) were married with children and four were in full-time employment. No adverse events were reported. Majority (83%) rated it a good program. Half suggested a longer program.

**Conclusions:** This pilot study demonstrated the feasibility of undertaking a high intensity, progressive resistance intervention program in postmenopausal women with low bone mass. While uptake remains a challenge, the findings will be used to guide a randomised controlled trial grant application.

# A 5-year Experience with Wertheim’s Hysterectomy in Hospital Sultan Ismail Johor Bahru

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## ABSTRACT

**Introduction:** In Malaysia, cervical cancer is the 2nd most common cancer following breast cancer. Its management is based on clinical staging of the disease. Radical hysterectomy with concurrent chemoradiation is its primary treatment. **Methods/Objectives:** A total number of 113 cases of Wertheim’s Hysterectomy done for early stage cervical cancer from 2010-2014 were retrospectively analysed to evaluate outcomes of the surgery. **Results:** Patients were of an average age of 51-60 years old (36%). 43.4% of them were Malays, followed by Chinese (41.6%) and Indians (6.2%). 40.7% of them were overweight with BMI 23-27.4, 51.3% were menopausal. Presurgery, patients were staged 1A1 (0.9%), 1A2 (5.3%), 1B1 (32.7%), 1B2 (34.5%), 2A1 (12.4%) and 2A2 (14.2%). 63.4% of tumors were 4 cm and below in size. Histologically, 57.1% were squamous cell carcinomas, 28.3% adenocarcinomas, 5.3% adenosquamous carcinoma, 4.4% neuroendocrine, 0.9% clear cell carcinomas, 0.9% sarcomas and 2.7% others. Mean duration of surgery was 3.8 hours. Mean blood loss was 925 mls. Complications were as follows; surgical site infections (14.2%), vessel injury (8%), nerve injury (0.9%), iatrogenic adjacent organ injuries (4.5%) which consists of bladder injury (0.9%), bowel injury (2.7%) and ureteric injury 0.9%. Long term complications include venous thromboembolism (10.6%), lymphedema (2.7%), lymphocyst (9.7%), enterocutaneous fistula (1.8%), rectovaginal fistula (0.9%), urethrovaginal fistula (0.9%), vesicovaginal fistula (1.8%), ureterovaginal fistula (0.9%). 50.4% of patients received concurrent chemoradiation or additional brachytherapy. 18.6% of patients developed local recurrence and 20.4% subsequently developed distant metastases. **Discussion:** Cervical cancers that are detected early has better prognosis. Constant evaluation of our management is important for the Improvement of quality of care for patients.