

THE EFFECT OF PREOPERATIVE WAITING TIME ON THE QUALITY OF LIFE OF UROGYNÆCOLOGY PATIENTS

Hypothesis / aims of study

Urinary incontinence and pelvic organ prolapse (POP) are common conditions, affecting a large segment of women. The lifetime risk of surgery for POP has been found to be 19% in the general female population [1]. Both urinary incontinence and POP can significantly decrease the quality of life (QoL) of women [2].

One of the risk factors for developing urinary incontinence and POP is advancing age. Based on prediction modelling, it is estimated that demand for care of pelvic floor disorders will increase at twice the rate of growth of the same population [3]. Due to the prevalence of urinary incontinence and POP in an aging population of women, the medical system is overwhelmed. Wait time benchmarks had been set in certain areas, such as hip and knee replacement, but no wait time benchmarks for urogynaecological surgeries existed.

This study aimed to compare the QoL scores of females awaiting surgery for POP to those of females awaiting surgery for hip or knee replacement. This study also aimed to compare surgical wait times between these two groups. If patients waiting for urogynaecological surgery have similar or worse QoL compared to patients waiting for orthopaedic surgery, there should also be wait time benchmarks for urogynaecological surgery.

Study design, materials and methods

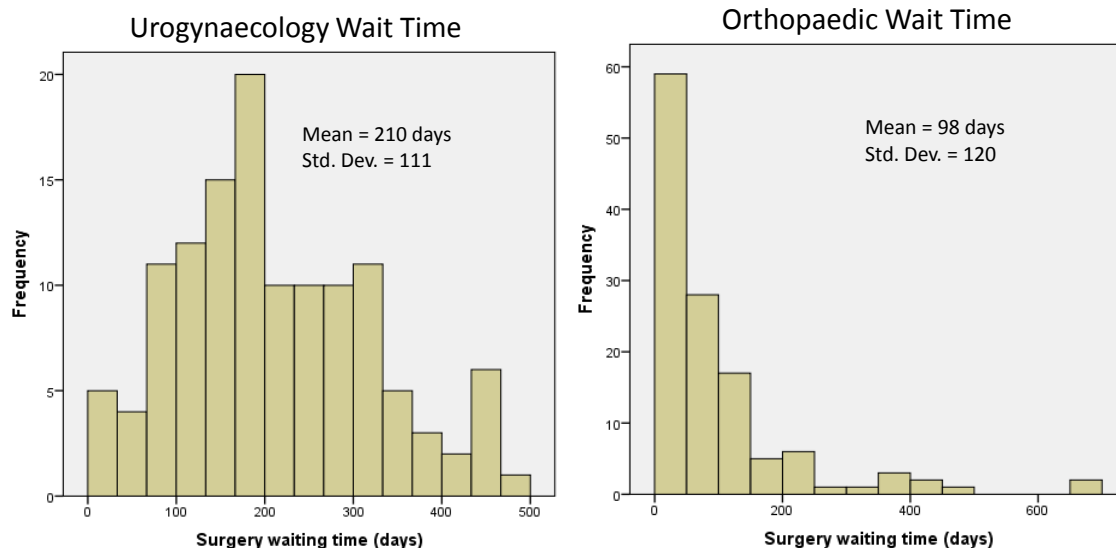
This was a prospective cohort study. Women who had decided to undergo either surgical repair of POP (anterior or posterior repair, hysterectomy, and/or vaginal vault suspension) or a hip or knee replacement were approached for possible recruitment. Women who were on both surgical wait lists (POP repair and hip/knee replacement) simultaneously were excluded.

All women completed a validated QoL questionnaire, the Short Form 36 Health Survey (SF-36). Urogynaecology patients completed the Urinary Distress Inventory (UDI-6) and the Incontinence Impact Questionnaire (IIQ-7) which are validated questionnaires assessing symptoms of urinary incontinence. Orthopaedic patients completed the Western Ontario and McMaster Universities Arthritis Index (WOMAC), a validated questionnaire assessing symptoms of osteoarthritis. The date of the decision to operate was recorded. Patients were followed prospectively and the date of their eventual surgery was obtained.

Sample size calculation was performed using the student's t-test (making an assumption that the SF-36 score will approach a normal distribution). Using a 2-tailed test with power of 0.8 and alpha of 0.05, a 15% difference between groups, and adding 10% to the sample size for a conservative estimate, the sample was calculated to be 125 per group.

Results

There were 171 and 144 women recruited from each of the urogynaecology and orthopaedic clinics respectively. Within each of the urogynaecology and orthopaedic groups, 125 women satisfied criteria to be included in the analysis. Orthopaedic patients were older than urogynaecology patients, with an average age of 65 and 59 respectively ($p < 0.001$). Forty-six percent of orthopaedic surgeries were revisions compared to 38% of urogynaecological surgeries ($p = 0.12$). The mean WOMAC score for orthopaedic patients was 58. Mean UDI-6 and IIQ-7 scores for urogynaecology patients were 11 and 10 respectively. The mean physical component score for QoL on the SF-36 was significantly worse for the orthopaedic patients compared to the urogynaecology patients (29.2 versus 41.5 respectively, $p < 0.001$). The mean mental health component scores of the SF-36 were similar between both orthopaedic and urogynaecology patients (44.6 versus 41.4 respectively, $p = 0.09$). Composite scores did not change when controlling for age on regression analysis. The mean wait time for hip or knee replacement surgery was 98 days which was significantly shorter than the mean wait time of 210 days for POP surgery ($p < 0.001$).



Interpretation of results

Physical symptoms affecting QoL are worse for orthopaedic patients awaiting hip or knee replacement compared to urogynaecology patients awaiting POP surgery. Given that the physical composite score was based upon bodily pain and physical disability, a lower score in the orthopaedic group was predictable. Mental health symptoms affecting QoL were similar between the orthopaedic and urogynaecology patients. Both groups therefore had similar emotional disability, affect and distress. Overall mean physical and mental health scores were below the norm for both groups of patients, indicating decreased QoL for all patients. The mean wait time for POP surgery is more than twice the mean wait time for hip or knee replacement, with urogynaecology patients waiting on average 210 days for their surgery. In light of the comparable mental health symptoms between the two groups and the significantly longer waiting time for surgery for urogynaecology patients, wait times for POP surgery need to be improved.

Concluding message

Urogynaecology patients wait an average of 210 days for their POP surgery, which is significantly greater than orthopaedic patients who wait an average of 98 days for their hip or knee replacement. Urogynaecology and orthopaedic patients show similar emotional distress and disability based on a validated QoL questionnaire. Given that urogynaecology patients have similar emotional suffering but wait more than twice as long for their surgery, the surgical wait times for urogynaecology patients needs to be improved.

References

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Disclosures

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