Profile of Gynaecology Surgeries from the Western Province, Solomon Islands

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Introduction: There is a paucity of data on the profile of gynaecological conditions affecting women in the Solomon Islands, including the availability and quality of surgical management. The country’s specialist obstetric and gynaecology services are located in the capital, Honiara, however access to care is impeded by obstacles of cost and transport across the archipelago as over three quarters of the population are rural dwelling.[1]

Methods: Prospective study of patients undergoing gynaecological surgery at Gizo Hospital, Western Province, during a 6 day program by volunteer Australian surgeons. Data was collected on pre-operative history, investigations, surgeries, and post-operative recovery. Full blood count, cross-match, urine analysis, abdominal ultrasound were available in Gizo. Pathology specimens were sent to Brisbane. [Ethics approval HRE023/17].

Results: Patient characteristics and presenting complaints.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>% [number]</th>
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<tr>
<td>Age (median [IQR])</td>
<td>40 [12]</td>
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<tr>
<td>Parity</td>
<td>0 (22%)</td>
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<tr>
<td>BMI</td>
<td>18-25 (30% [6])</td>
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<tr>
<td>Contraceptive use</td>
<td>18% (4)</td>
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<tr>
<td>Previous cervical screening</td>
<td>33% (7)</td>
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Cancellations:
- 2 cases cancelled due to Dengue fever (thrombocytopenia of 31x10^9/L in one case) - a common surgical challenge in the Pacific Islands, although no published studies exist...

Estimated blood loss: Median 10 ml (range 5-400ml). No patients required intraoperative or post-operative blood transfusion.

Discussion: This study demonstrates the feasibility of integrating gynaecological surgery in regional hospital facilities, including the first series of laparoscopic gynaecological surgery in the Solomon Islands, with most patients having surgical outcomes comparable to those in a developed setting. This local data is critical to guiding resource allocation, foreign aid, directing training of health staff for capacity building.[2].

Results: Surgeries performed and pathologies found:

Vaginal surgery (n=12)
- Performed under general anaesthesia
  - Dilatation and curettage (n=8)
    • All benign
  - Diathermy to cervix (n=2)
  - Excision of vaginal wall cyst (n=1)
  - Diathermy to genital warts (n=1)

Laparotomy (n=9)
- Performed under spinal anaesthesia
  - Total abdominal hysterectomy (TAH)
  - Adenomyosis
  - Fibroid (a, b)
  - Tubal cysts
  - Endometrioma
  - Oophorectomy (n=1): (c)
  - Ovarian teratoma

Laparoscopy (n=8)
- Performed under general anaesthesia
  - Diagnostic laparoscopy (n=6):
    • Endometriosis
    • Parafimbrial cyst
    • Subserous fibroids
    • Mesothelial inclusion cyst
    • Chronic pelvic inflammatory disease
  - Operative laparoscopy (n=2):
    • Ovarian cyst, para-ovarian cyst

Post operative stay:
- Vaginal surgery: 0-1 day
- Laparoscopy: all 1 day
- Laparotomy: 2-4 days.

Mobile population require longer lengths of stay to manage any early post-operative complications.

Laparoscopy in Solomon Islands: NEW

Using donated equipment and laparoscopy stacks. Could replace laparotomy for common procedures, eg. ovarian cystectomy, and allow resection of endometriosis, and tubal dye studies, with ↑ healing, ↓ pain, ↓ hospital stay.