

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.

Characteristic	% (number)
	n=23
Age (median (IQR))	40 (12)
Parity	
0	22% (5)
≥1	78% (18)
BMI	
18-25	30% (6)
25-30	35% (7)
>30	35% (7)
Contraceptive use	18% (4)
Previous cervical screening	33% (7)
Pre-operative hemoglobin <110g/L	22% (5)
Presenting complaint	
Bleeding dysfunction	83% (19)
Pain	86% (20)
Infertility	18% (4)

Pain control:

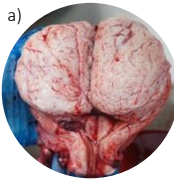
 Spinal anaesthetic was effective and safe for hysterectomies.

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.

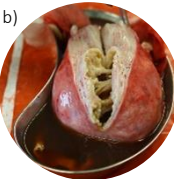
Results: Surgeries performed and pathologies found:



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)



Degenerating cystic fibroid

Laparotomy (n=9)

Performed under spinal anaesthesia

- Total abdominal hysterectomy (TAH) +/- salpingectomy +/- oophorectomy
 - Adenomyosis
 - Fibroid (a, b)
 - Tubal cysts
 - Endometrioma
- Oophorectomy (n=1): (c)
 - Ovarian teratoma





Teratoma with fat, hair, bone, and cartilage.

Laparoscopy (n=8)


Performed under general anaesthesia

- Diagnostic laparoscopy (n=6):
 - Endometriosis
 - Parafimbrial cyst
 - Subserous fibroids
 - normal
 - Mesothelial inclusion cyst
 - Chronic pelvic inflammatory disease
- Operative laparoscopy (n=2):
 - Ovarian cyst, para-ovarian cyst

Cancellations:


- 2 cases cancelled due to Dengue fever (thrombocytopenia of $31 \times 10^9 / L$ 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.

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.

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].

1. Solomon Islands National Statistics Office. 2006/2007 Solomon Islands Demographic and Health Survey. Honiara: Solomon Islands Government, 2007.

2. Watters, DA, Ewing H, McCaig E. Three phases of the Pacific Islands Project (1995-2010). ANZ Journal of Surgery. 2012; 82: 318-24. doi:10.1111/j.1445-2197.2012.06036.x