Termination of pregnancy in a tertiary centre – a clinical audit

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Abstract

Introduction: Medically indicated termination of pregnancies (TOP) may be performed for a variety of maternal and fetal reasons. An audit was performed to review the indications, method of termination, outcome and complications in a tertiary centre.

Methods: The clinical records were reviewed for all terminations over a 12 month period in 2017 at a tertiary level hospital and audited for their indication, method and outcomes.

Results: 70 terminations were performed in 2017. 21 surgical terminations were performed between 11 and 15 weeks gestation. 49 medical terminations were performed between 12 and 32 weeks gestation. Indications for termination were 16% maternal, 44% chromosomal and 26% structural abnormalities. 7 cases had feticide performed. 77% had invasive testing (CVS or amniocentesis) prior to termination. Mifepristone was used in one surgical termination and in 92% of medical cases. 78% of women required up to 2 doses of misoprostol, with average time to birth following misoprostol reducing with parity. 16% of medical terminations and 33% of surgical terminations had a blood loss greater than 500mLs. 51% of women undergoing medical termination and 33% of those having a surgical termination had a complication, including retained products, endometritis, or haemorrhage. 53% of women having a medical termination elected for a post-mortem examination.

Discussion: This audit provides information on the indications, management and outcome for both surgical and medical termination of pregnancies to help guide counselling when offering terminations in a tertiary centre.

Objectives

To assess the number, indications, methods and complications of terminations in a tertiary hospital

Methods

A retrospective review of the complete patient notes was performed for all cases resulting in termination in the year 2017.

Inclusion criteria:
- Termination of pregnancy performed at CHWC

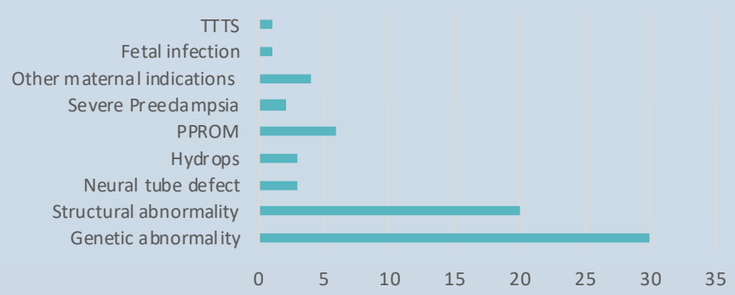
Data included:
- Maternal demographics
- Gestation
- Indication for termination
- Utilisation of invasive testing prior to termination
- Mode of termination
- Use of feticide
- Mode of termination
- For all medical terminations: gestation, medications used, length of time to complete, analgesia used, complications
- For all surgical terminations: gestation, medications used, complications
- Utilisation of post mortem

Results

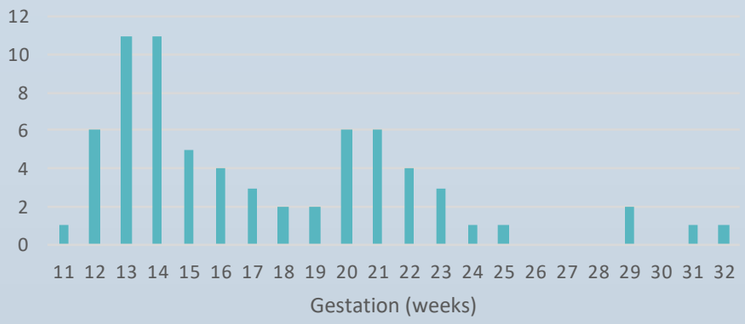
In the year of 2017, 79 women used the service for TOP counselling
- 70 women proceeded to complete a TOP at the tertiary centre and had notes available for review

Demographic information:
- Age: Mean 32 years, Min 17 years, Max 42 years
- Parity: 31% nulliparous; 46% para 1

Indications:



Timing of termination:
- Range 11 to 32 weeks



Invasive testing:
- 77% (46) had CVS or amniocentesis

Feticide:
- No feticides for surgical TOPs
- Of 49 medical terminations, 7 had feticide
  - Gestations 19 – 31 weeks
  - 6 used potassium chloride, 1 used rocuronium

There were 21 surgical terminations
- Gestational age: 11 – 15 weeks
- 1 used mifepristone prior to the procedure
- 17 cases used preoperative misoprostol
- Complications
  - Average blood loss of 563mL (range 100 – 1500mL)
  - 33% had >500mL blood loss; 4 cases had a blood losses >1000mL (19%)
  - 1 case (5%) required repeat curettage for retained products

There were 49 medical terminations
- Gestational age: 12 – 32 weeks
- 46 used mifepristone
- 48 used misoprostol
  - Average time of administration post mifepristone was 49 hours (range 28 to 73 hours)
  - 78% of women needed 2 or less doses of misoprostol
  - The average time to birth from first dose of misoprostol was 6 hours, with 90% of women birthing within 12 hours
  - Increasing parity was directly proportional to decreasing misoprostol doses and shorter time to birth
- Complications:
  - Average blood loss was 449mLs (range 30 – 2200 mL)
  - 12% (6) had a PPH of >1500mL
  - 1 case had a uterine rupture needing operative management, ICU admission and blood transfusion
  - 10% required manual removal of placenta
  - 10% required a later curettage for retain products of conception

Post mortem examination
- All surgical TOPs had products sent for histology
- All medical TOPs had the placenta sent for examination
- 53% of medical TOPs had a post mortem examination

Discussion

70 women underwent termination of pregnancy at CHWC in 2017.

There was a bimodal distribution of gestational age for termination, likely correlating with first trimester screening and the fetal morphology ultrasound.

The main indications for termination included genetic abnormalities (primarily trisomy 21 and 18) and structural abnormalities (most commonly brain anomalies). The majority of cases had invasive diagnostic testing e.g. CVS or amniocentesis. Feticides with KCl (6) and rocuronium (1) were performed in 7 cases before medical terminations at gestational ages of 19 – 32 weeks. However there were still pregnancies after 23 weeks that didn't have feticide.

Of those who had surgical terminations, the majority had misoprostol preoperatively. The average blood loss was 563mL, with 33% losing >500mL and nearly one fifth of women losing greater than 1500mLs, however no blood transfusions were needed. There were no recorded cases of perforation.

For the medical terminations, the majority of women delivered within 8 hours following a course of mifepristone and misoprostol – in fitting with literature regarding dosing interval and time to delivery. 50% had a recorded complication, including need for manual removal (10%), need for later curettage for retained products (10%), postpartum haemorrhage (17%). There was one case of uterine rupture (in a patient with previous uterine scar) requiring laparotomy, ICU and blood transfusion.

Conclusion

Termination of pregnancy is an important service to women who have fetal or maternal complications.

Auditing local hospital outcomes allows hospital-specific counselling as well as identification of outcomes different from those published in the literature.

This audit demonstrates a higher level of blood loss in surgical versus medical terminations. However the medical terminations had a 50% chance of an adverse event, ranging from birthing out of the hospital to PPH to uterine rupture.

References

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