

Evaluating the Management and Follow-Up Care of Mid-Trimester Miscarriages

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Introduction

- Mid-trimester miscarriage is defined as the spontaneous loss of pregnancy between 13+0 to 23+6 weeks
- An estimated 1–2% of second-trimester pregnancies end in a miscarriage before reaching 24 weeks of gestation⁽¹⁾
- Risk factors include advancing maternal age, medical co-morbidities, inherited thrombophilic defects, previous miscarriages, genetic and anatomical factors (including cervical weakness and congenital uterine malformation)⁽¹⁾

Aims

- To identify risk factors present within our population
- Assess the management and follow-up investigations of mid-trimester miscarriages at Epsom and St Helier University Hospitals over a 4-year period
- To compare this against the proposed guidance stated by the RCOG Greentop Guidelines No.17⁽¹⁾
- Provide recommendations to improve our future practice

Methods

- All women who underwent a mid-trimester miscarriage between January 2018 and January 2022 at Epsom and St Helier University Hospitals were retrospectively identified
- Data was collected and analysed on excel regarding risk factors, management and follow-up care provided
- This was then compared against pre-defined standards as stated by the RCOG guidelines

Results

Age & BMI

Age

19-24

25-29

30-34

35-39

40+

BMI

18-20

21-24

25-29

30-40

40+

• Age Range: 19 – 45 years old

• Mean- 31 years old

• 42% ≥ 35 years old

• BMI Range: 18.9 – 52.7

• Mean- 27.1

• 18.5% BMI ≥30

Identified Risk Factors

61% had 1 or more medical co-morbidities

15.6 % were on recurrent miscarriage treatment regime

7.8 % had previous mid-trimester miscarriages

7.8 % had cervical surgery

42.2 % had PV bleeding

34.4 % had PPROM

Follow-Up Investigations

Maternal Investigations

US Pelvis

17.2%

82.8%

Thrombophilia Screen

81.2%

18.8%

Antiphospholipid Antibodies

82.8%

17.2%

Foetal Investigations

Placental Histology

76.7%

20.3%

3.1%

Post-Mortem

57.8%

21.8%

20.3%

Karyotyping

57.8%

21.8%

20.3%

Management

A total of **64 women** were identified:

• 37% underwent expectant management

• Of which 12.5% required further management

• 57.8% underwent medical management

• Of which 18.9% needed further management – MROP or surgical

• 4.7% underwent surgical management

Follow-Up Care

Recurrent Miscarriages Clinic

36%

64%

Debrief

64%

31%

5%

Longer Term Outcomes

32.8% of women went on to have a further successful pregnancy

Conclusion

- A multitude of risk factors were identified amongst our population with 42% of women being ≥ 35 years old and 61% of women having 1 or more medical co-morbidities
- Most women were managed medically with a small proportion requiring further surgical management
- A large proportion of women are not being referred to the recurrent miscarriages clinic or did not have a debrief offered/completed
- Further work could be done to ensure that follow-up investigations are performed for these women – particularly ensuring they have an ultrasound pelvis

Recommendations

- To update trust guidelines to ensure all RCOG recommended follow-up investigations are carried out for all women who has had a mid-trimester miscarriage, in particular an ultrasound pelvis to rule out any anatomical malformations
- Ensure clear documentation to state if investigations have been offered and if this is declined by the women
- Aim for a 100% placental histology rate as patients who decline a post-mortem can still be offered this
- Aim for all women to be seen in debrief and recurrent miscarriages clinic within 3 months

References

(1) The Investigation and Treatment of Couples with Recurrent First-trimester and Second-trimester Miscarriage Green-top Guideline No. 17. Royal College of Obstetricians and Gynaecologists; 2011 [cited 2023 May 27]. Available from: https://www.rcog.org.uk/media/3cbgon10/gtg_17.pdf