Progesterone therapy

TARGET AUDIENCE	Secondary Care
PATIENT GROUP	Pregnant women with threatened miscarriage, previous recurrent miscarriage, previous preterm birth/2nd trimester loss

Clinical Guidelines Summary

- Progesterone therapy has proven benefits in the treatment of the following conditions in pregnancy:
  - Threatened miscarriage and history of one or two previous miscarriages (5% improvement in live birth rates).
  - Threatened miscarriage and history of three or more previous miscarriages (15% improvement in live birth rates).
  - Recurrent miscarriage without bleeding.
  - Previous preterm birth/2nd trimester miscarriage and short cervix.
- For miscarriage prophylaxis for women fulfilling the criteria, treatment can begin from 6 weeks of gestation after a scan has confirmed the presence of an intrauterine pregnancy.
- For miscarriage prophylaxis, treatment is given in the form of micronised progesterone 400mg twice/day until 16 weeks of gestation (unless the patient prefers to stop treatment at 12 weeks).
- Standard NHSL unlicensed medicine consent form and detailed consent to progesterone treatment to be completed by patient and prescriber.
- For preterm birth/2nd trimester miscarriage prophylaxis, treatment is given in the form of micronised progesterone 400mg twice/day until at least 34 weeks of gestation.

Guideline for Use of Progesterone Therapy in Pregnancy

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Introduction

There is some evidence that progesterone therapy may be of benefit for some women with complications of threatened miscarriage, recurrent miscarriage and prophylaxis against preterm birth or 2nd trimester miscarriage. This guideline outlines clinical situations where progesterone treatment may be of benefit and subsequent management of these patients**.**

Use of progesterone in threatened miscarriage.

- Telephone triage all women who present with bleeding in early pregnancy for supportive care or face-to-face review +/- ultrasound scan.
- If a scan is indicated, then arrange appointment in EPAS.
    - If the scan is inconclusive, manage according to Guideline for Inconclusive Scans.
    - If the scan confirms intrauterine pregnancy with fetal heartbeat, manage as follows:

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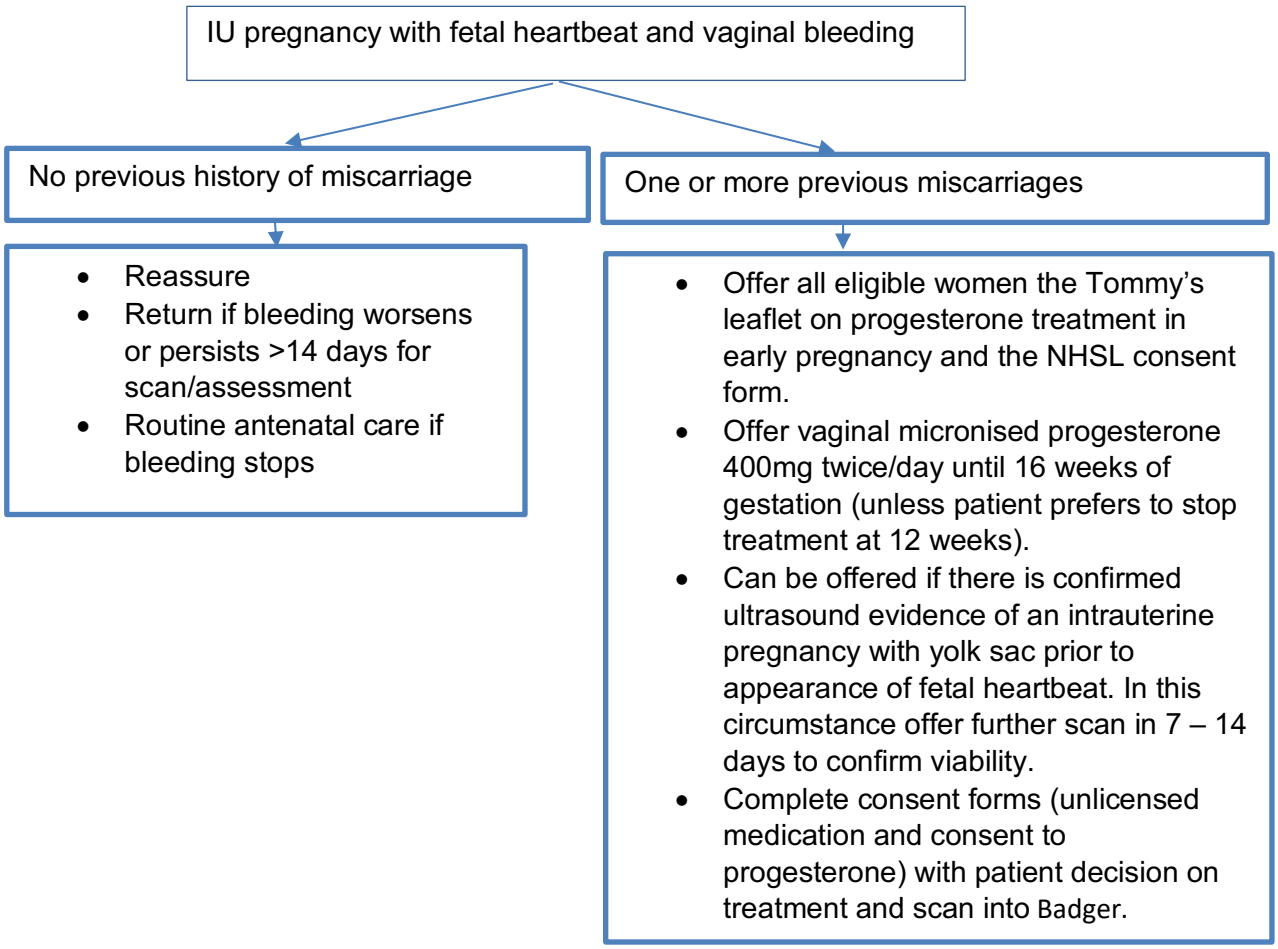

- There is evidence in the medical literature[1-4] for the use of progesterone in reducing the risk of miscarriage in women with early pregnancy bleeding and a history of miscarriage.
- Women with bleeding and one or two previous miscarriages using progesterone, increases the likelihood of a livebirth by 5%.
- Women with bleeding with three or more previous miscarriages using progesterone, increases the likelihood of a livebirth by 15%.
- Duration of treatment is recommended in NICE guideline to be 16 weeks and this should be offered to women unless they prefer to stop treatment at 12 weeks.

Use of progesterone in recurrent miscarriage.

- See also guideline on recurrent miscarriage.
- Progesterone can increase the livebirth rates for women who experience recurrent miscarriage[1-3,5].
- Consider micronised progesterone 400mg twice daily after ultrasound confirmed intrauterine pregnancy in women with bleeding and recurrent miscarriage. Start treatment at time of bleeding and continue until 12 or 16 weeks of gestation.
- Women with recurrent miscarriage and previously successful pregnancy using progesterone treatment, may attend requesting similar plan in a new pregnancy in the absence of bleeding. There is evidence that routine progesterone supplementation for women with recurrent miscarriage in the absence of bleeding may be of benefit but this is less robust. Progesterone therapy (micronised progesterone 400mg twice daily till 12 or 16 weeks), can be offered after discussion with the woman about the risks and benefits.
- Routine supplementation should be used with caution in asymptomatic women with unexplained recurrent miscarriage (>=3 previous miscarriages, previous successful pregnancy after miscarriage using progesterone). There is some evidence in the literature of benefit, but the Promise trial did not show any benefit. Women requesting this treatment should be referred for further discussion about the risks and benefits of treatment to the duty EPAS/Day care/Triage consultant.

Use of progesterone in prophylaxis for preterm birth/2nd trimester miscarriage.

- See also guideline on preterm birth.
- Woman with a history of 2nd trimester spontaneous loss or a history of spontaneous preterm birth up to 34 weeks of gestation, with transvaginal ultrasound evidence (between 16 and 24 weeks) of short cervix (<=25mm) should be offered the choice of prophylactic vaginal progesterone or prophylactic cervical cerclage[6].
- Women choosing vaginal progesterone should be offered 400mg progesterone twice daily until at least 34 weeks of gestation.

References

1. Quenby S et al. Miscarriage matters: the epidemiological, physical, psychological, and economic costs of early pregnancy loss. Lancet 2021; 397: 1658-1667. lancetrecommendationsmiscarriage.pdf
2. Coomarasamy A et al. Sporadic miscarriage: evidence to provide effective care. Lancet 2021; 397: 1668-1674.
3. Coomarasamy A et al. Recurrent miscarriage: evidence to accelerate action. Lancet 2021; 397: 1675-1682.
4. NICE Guideline NG126, 2023. Ectopic pregnancy and miscarriage: diagnosis and initial management. nice miscarriage ectopic.pdf
5. RCOG GTG17, 2023. Recurrent miscarriage. GTG recurrent miscarriage.pdf
6. NICE Guideline NG25, 2022. Preterm labour and birth. nice preterm birth.pdf
7. Consent to progesterone treatment - http://firstport2/staff-support/practice-development-centre/nmahp-clinical-records/Documents/Consent%20to%20Progesterone%20Treatment%20in%20Early%20Pregnancy%20SAMPLE.pdf

Appendix 1

Please see link for patient information leaflet from Tommy's regarding the use of progesterone for vaginal bleeding in early pregnancy: https://www.tommys.org/sites/default/files/2022-11/Tommys%20Progesterone%20Guide%20FINAL.pdf

Guideline for Use of Progesterone Therapy in Pregnancy

Clinical governance

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		Initial document	1
05/12/2024	Evelyn Ferguson	Modification to offer treatment to women with two or more miscarriages	2
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