

Recurrent Pregnancy Loss

National Women's Health Annual Clinical Report Presentation Day

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Outline

- Background
- RPL Clinic
- Treatment
- Clinic data



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Recurrent Pregnancy Loss (RPL)

- 1-2% of women of reproductive age
- Definition varies: 3 or more consecutive pregnancy losses (RCOG)/ 2 or more (ESHRE/ASRM)
- Prognosis worsens with advancing number of prior miscarriages and maternal age
- Identifiable causes
 - Autoimmune
 - Structural
 - Genetic
 - Lifestyle
- Often unexplained – good prognosis

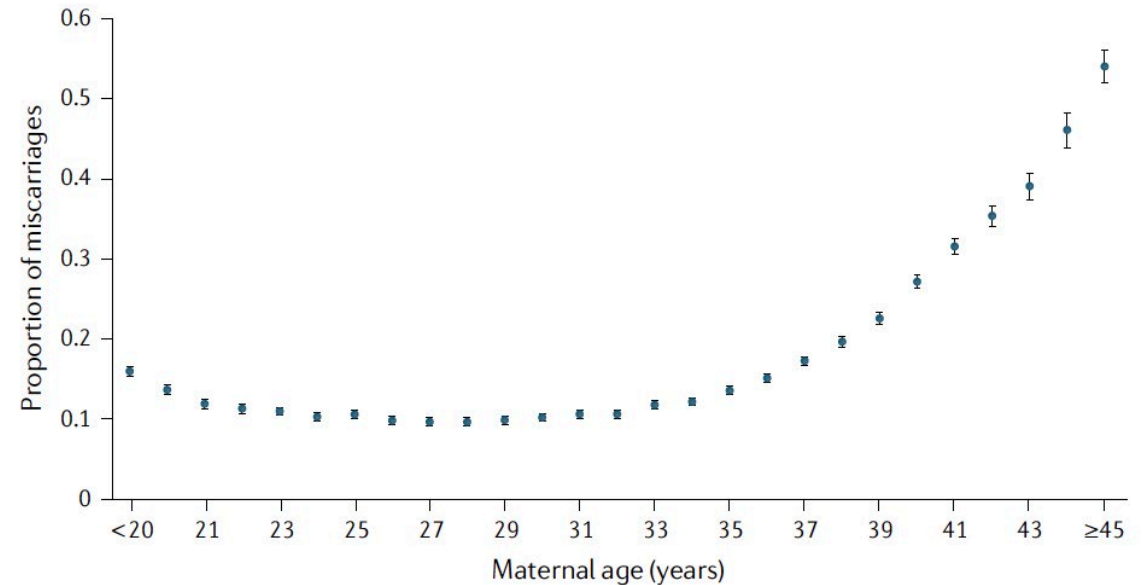


Fig. 1 | **Association between age and pregnancy loss.** A population-based study

Magnus et al 2019

National Women's Health RPL Clinic

- Fertility Plus, Greenlane Clinical Centre
- Tuesday and Thursday
- Nurse-led, supported by doctors
- Referral criteria
 - Patient resides in WDHB/ADHB/CMDHB area
 - <40 years
 - 3 or more consecutive first trimester pregnancy losses, or 2 or more consecutive second trimester losses (including molar/partial molar/ectopic)

Referral Investigations

- Maternal antenatal blood screen
- Maternal and paternal karyotype
- Antiphospholipid antibodies
- APC resistance
- TSH
- FSH/E2
- HbA1c
- 3D Transvaginal ultrasound pelvis



Referral/management
as indicated

RPL Clinic – supportive care

- Pre-pregnancy appointment
- Nurse-led monitoring of first trimester
- Weekly scans with doctor
- Counsellor support
- Progesterone where indicated
- First trimester screening
- Karyotyping of POC if further miscarriage

- Discharge to LMC at 12-14 weeks



Progesterone for RPL

- Indicated if prior RPL with current threatened miscarriage
- Dose 400mg PV BD until 16/40
- Not funded, but Pharmac are considering...



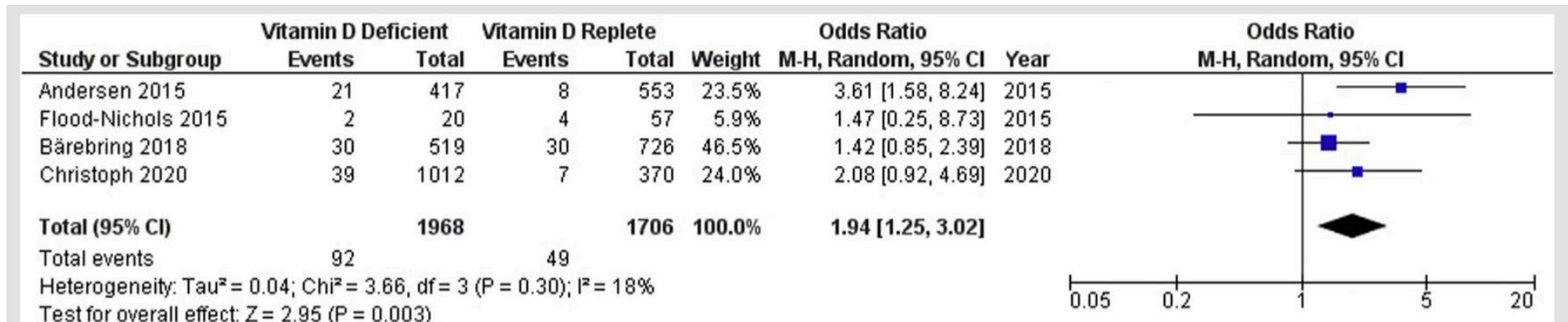
Cochrane Database of Systematic Reviews

**Progestogens for preventing miscarriage: a network meta-analysis
(Review)**

Devall AJ, Papadopoulou A, Podsek M, Haas DM, Price MJ, Coomarasamy A, Gallos ID

Other treatments

- Lifestyle factors e.g. BMI modification
- Psychological support
- ?Vitamin D

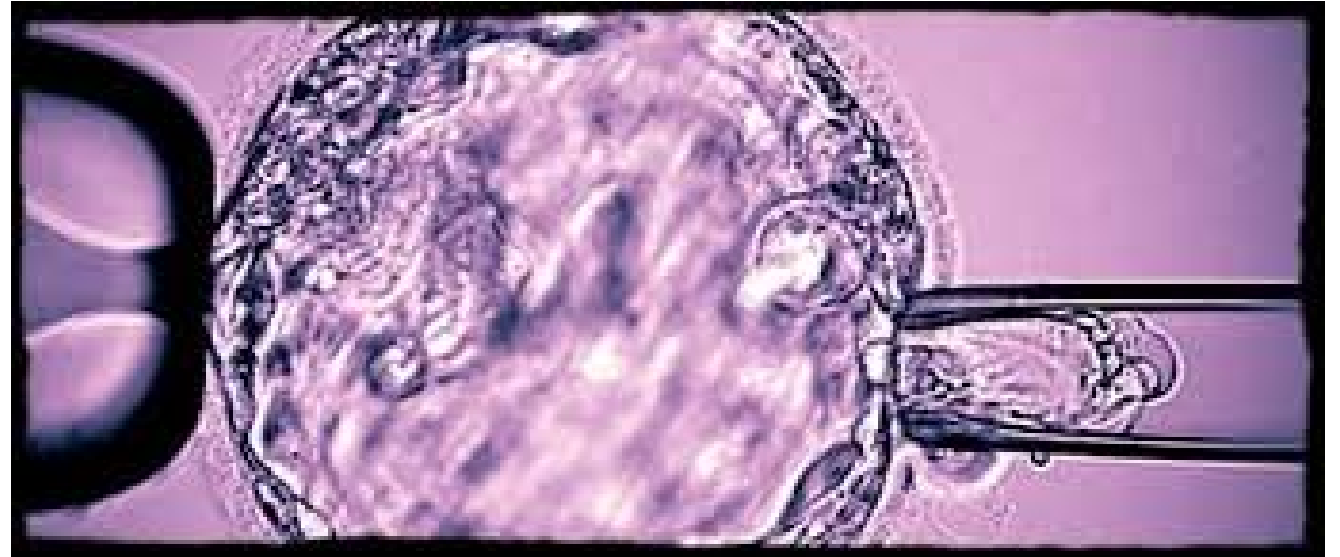


Comparison of the risk of miscarriage by vitamin D deficient and sufficient status. Forest plot summarizing the results of the meta-analysis comparing the risk of miscarriage in women with deficient and sufficient levels of vitamin D. CI = confidence interval; M-H = Mantel–Haenszel.

Tamblyn. Vitamin D and miscarriage. *Fertil Steril* 2022.

Preimplantation Genetic Testing

- IVF cycle, obtain embryos to biopsy, freeze to await results
- PGT-SR for structural rearrangements
 - e.g. if parent has balanced translocation
- PGT-A for aneuploidy
 - Limited evidence for benefit
 - May reduce time to ongoing pregnancy
- May be funded (PGT-SR only) if criteria met
- Approx. 1 cycle/month (PGT-SR)

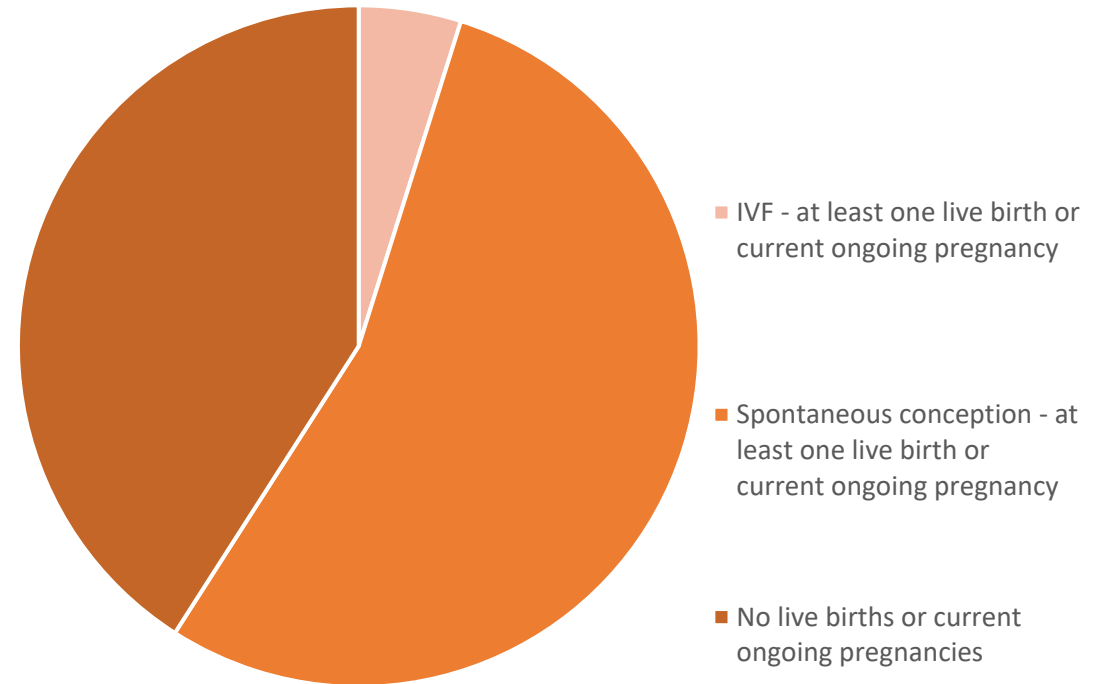


Clinic Data

- Jan 2016 – Dec 2020
- 474 patients seen for FSA

- 267 (56.3%) had at least one live birth/ongoing pregnancy (41 had two) since starting in clinic

- 60 (12.7%) had IVF
 - 26/60 had at least one LB from IVF
 - 7 had failed IVF but conceived spontaneously
 - 15 had PGT



PGT cycles

- 15 couples had PGT
 - 6 had PGT-SR and 3/6 had live birth
 - 9 had PGT-A and 5/9 had live birth
- No embryos suitable for transfer
- Multiple transfers without being pregnant
- Overall clinic data approx. 25% ongoing pregnancy rate for PGT-SR (half of those who have embryo for transfer)

Clinic Data

- 87 (18.4%) women had further miscarriage
- Of these, 15 had 2 or more
- 14 had ectopic pregnancy





Questions
