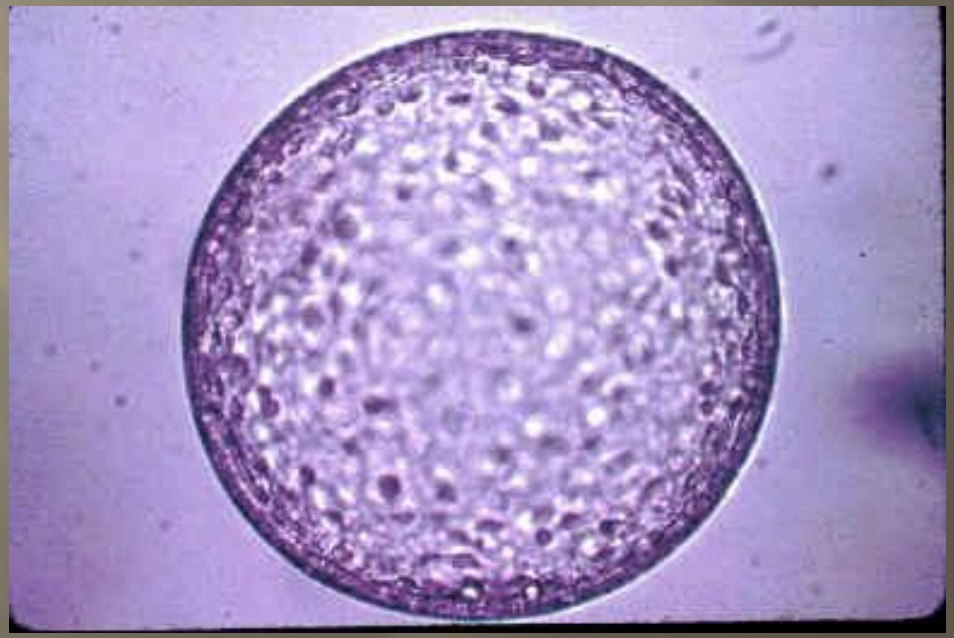
ATTAINING AND RETAINING SUCCESSFUL PREGNANCIES

Larry Dunne M.R.C.V.S.



Pregnancy Rate - Fertile Mares

- 80% after 1st natural cover (Vet Fee €100)
- 65% chilled semen (Vet Fees €200)
- 40% frozen semen (Vet Fees €350)
  - To establish pregnancy €700

Fertile Mares

- Adequate nutrition for at least 3 months prior to covering
- 4-18 years old
- Scan normal
  - Cysts
  - Uterine fluid
  - Confirmation
- If foal at foot; passed afterbirth within 2 hours of foaling
- No history of not going in foal

Subfertile Mares

- Old mares (over 18 years)
- Mares with excessive cysts/ uterine fluid
- 2 & 3 year old mares (nutrition)
- Mares with history of 'barren when foal at foot'
- Competing mares
  - Stress
  - Joints injected (not all, but most mares)

Subfertile Mares

- Joints injected
  - Do not cycle properly
  - Oocytes that do not produce embryos
  - Much higher incident of uterine infection
  - Affects mares for more than 12 months

Subfertile Mares

- Pregnancy rate
  - Affected much greater with frozen semen than natural cover or chilled semen
  - Best to ovulate within 12 hours of cover (oocyte)

Natural Cover (80%) cover before ovulation

- Ask for history of stallion
- May need as little as two scans (costs)
- Mare needs to ovulate with 48 hours of cover

Chilled Semen (65%) A.I. before ovualtion

- Best results when a mare ovulates within 24 hours of A.I.
- Chilling affects semen from all stallions, some more than others
- Best results when mare is A.I.'d within 6 hours of collection
- Chilled semen from Europe that is in transit up to 36 hours is not much better than frozen semen
- Needs more veterinary input than natural cover

Frozen Semen (40%) A.I. after ovulation

- Requires a lot of vet input (scan 4 times plus per day)
- Best results when mare is A.I.'d within 4 hours of ovulation
- Great variations between stallions (some don't freeze well)
- Great variations between batches of semen frozen from the same stallion
  - Time of year (spring) that semen is collected
  - Has the stallion received medication while competing

Frozen Semen (40%) A.I. after ovulation

- Some batches of semen will result in over 70% pregnancy

- Some batches of semen will result in 10% pregnancy or less
  - Costs
  - Mare A.I.'d 3+ times is less likely to go in foal

Frozen Semen (40%) A.I. after ovulation

- Requirements for semen
  - Cert that stallion has not received joint medication
  - Date of collection of semen
  - Pregnancy rates from different batches
  - Only sold on pregnancy

Owners Contribution

- Nutrition over three months
- Scan mare whilst not in season
- Records from previous year (mares repeat same cycle year after year)
- Avoid using bad semen
  - Costs
  - Less likely to get mare in foal with semen from different stallion

Owners Contribution

- Avoid using frozen semen on subfertile mares
  - Chances of pregnancy much greater with natural cover or chilled semen
- Do not A.I. with frozen semen on foaling heat
- Exercise
- Access to a teaser

Embryo Transfer

- 7 day pregnancy is transferred from donor to recipient
- Why do we use embryo transfer?
  - When we don't want a donor to carry a pregnancy
  - Why? Not able to maintain pregnancy
    - Old or some disability (ruptured prepubic tendon)
    - Want more than one foal
    - Want to continue competing

Previous advice on mares still applies:
– only recover an embryo if the mare is pregnant!

Flush Mare

- Donor – A.I. or natural cover
  - Flush 6.5 – 8.5 days
  - Can be cycled and flushed every 21 days
  - If competing – does not affect the performance
  - Multiple flushing doesn't affect ability to carry own foal at a later date
  - Twin follicles can result in two embryos

Flush Mare

- Recipients
  - Mare between 4 and 16 years and preferably had foal previous
  - Mares with foal at foot (> 40 days foaled) don't give high pregnancy rates
  - Nutrition
  - Needs to ovulate 1 day before to 4 days after donor mare
  - Size – small mare = small foal; big mare = big foal
  - Expect 90% pregnancy rate

Flush Mare

- Freeze
  - Flush 6.5 – 7.5 days
  - 50% pregnancy
  - Costs

Flush Mare

- Costs
  - Flush; Transfer; Pregnancy €1,400
    - Natural Cover (if possible): 10 flush – 8 pregnancies
    - Chilled Semen: 10 flush – 6 pregnancies
    - Frozen Semen: 10 flush – less than 4 pregnancies
- Foal from E.T. value €5,000