WOUND EDUCATION

CLINICAL TRAINING MADE EASY©

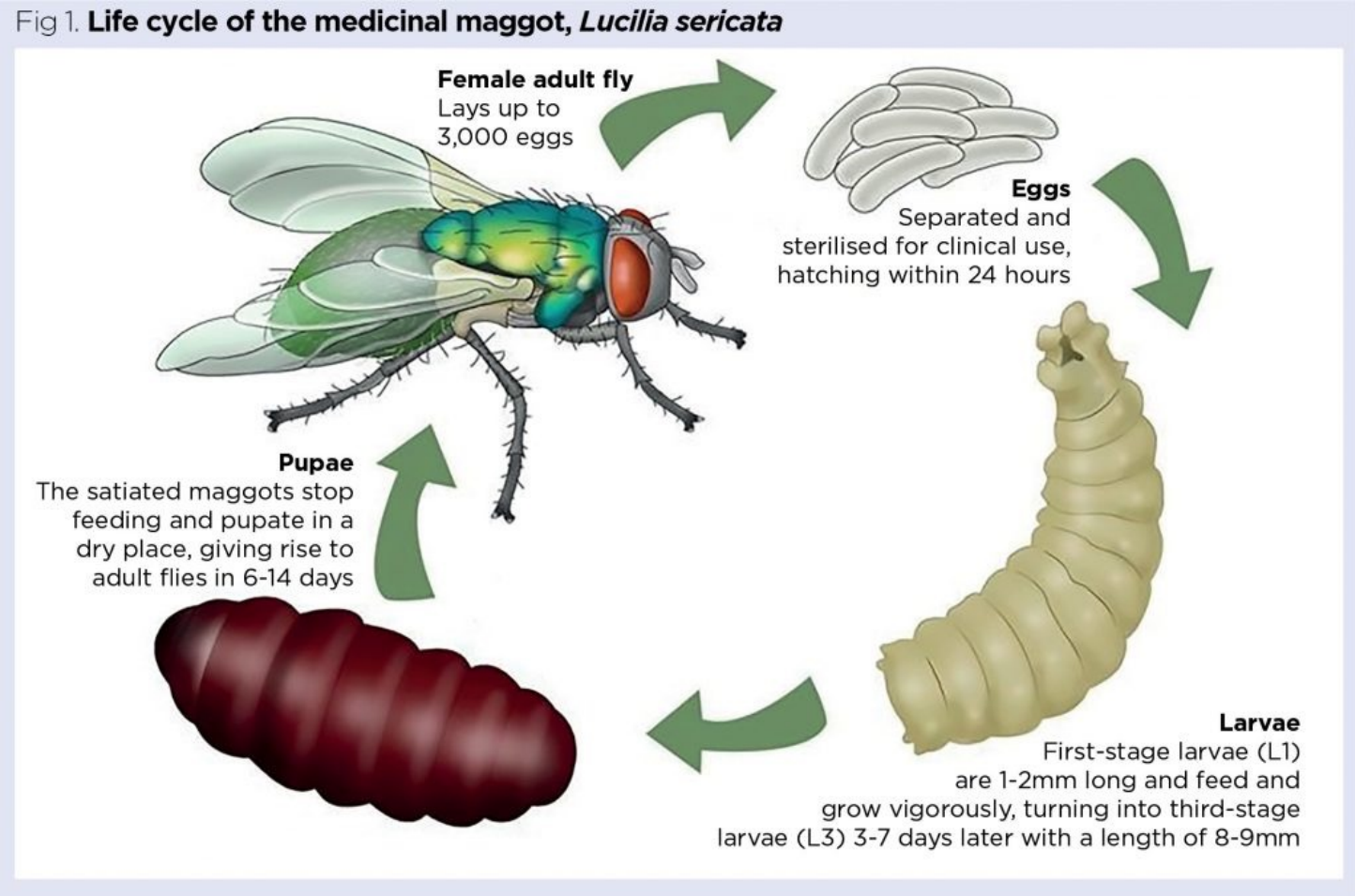
TRAINING SESSION 11

MODULE 4

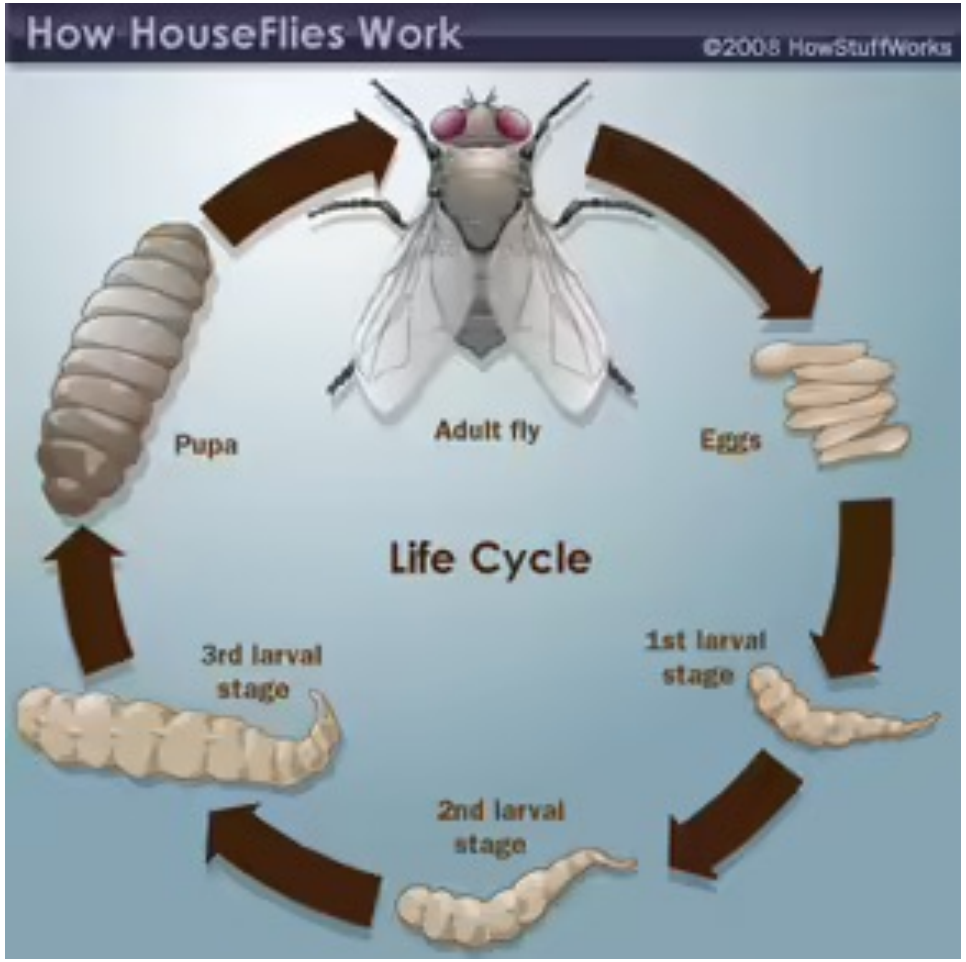
OUTLINE

- Life cycle of maggot
- Cutaneous myiasis
- Avoiding infestation
- Treating infestation
- Case Study

Maggot Life Cycle

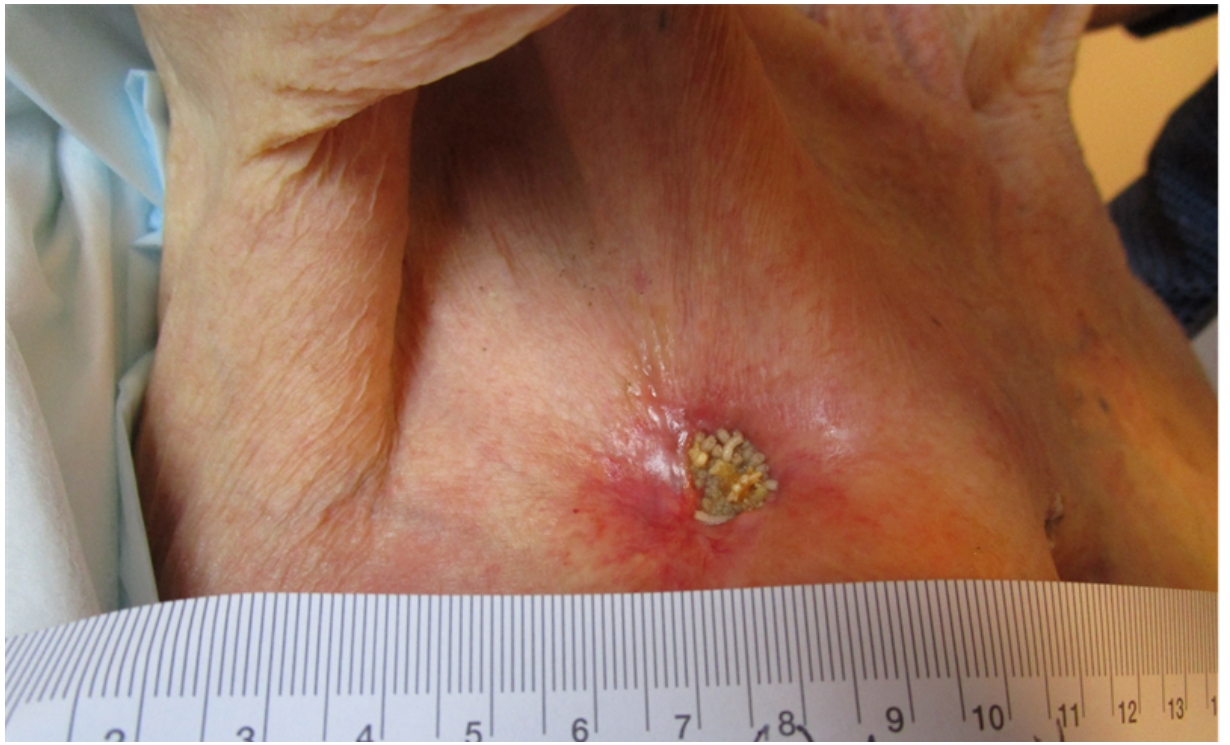


Nigam Y (2021) The principles of maggot therapy and its role in contemporary wound care. Nursing Times [online]; 117: 9, 39-44.



https://animals.howstuffworks.com/insects/housefly4.htm

Opportunistic – Feral - Infestation – Cutaneous Myiasis



Myiasis Information

- 11,000 species. Feral (Wild) or Therapeutic maggots
- The female has a keen sense of smell seeking out devitalised tissue
- Not all maggots eat devitalised tissue exclusively
- Photophobic dressing and *peek a boo* to check infestation
- Require body temperature to advance the life cycle
- Require oxygen to survive

Avoiding Infestation

- Fly screens
- Hats with fly netting
- Automatic insect sprays
- Insect repellent bands
- Insect repellent clothing spots
- Secure dressings/bandages
- Change soiled dressings
- Regular dressings, insect free area

Treatment

- Betadine
- Manual Removal or suction
- Paraffin Gauze - Vaseline
- Hydrocolloid powder
- Irrigation And flushing

SKIN AND WOUND CARE CONSULTANCY

If there is a larger maggot infestation, refer to these steps of removal:

- Pour a cap of betadine into the wound site.
- Leave it in the wound bed for 5 – 10 mins. This will kill maggots which reside on the surface of the wound. Flush maggots out of the wound bed with a 20 ml syringe of saline with a blunt drawing up needle. Wearing protective eyewear.
- Apply a dusting of stomahesive powder to inspect movement of any remaining maggots in the wound.
- Soak the wound with a betadine gauze pad. Keep the wound soaked for a 30 minutes and carefully inspect the wound by carefully lifting the gauze dressing.
- After 30 minutes, wipe away dead maggots from the surface of the wound. If there are some maggots left on the wound, use a pair of sterilized forceps to pluck them off the wound.
- Sprayed with microdacyn solution and covered with gauze impregnated with vaseline ointment to suffocate any remaining maggots and bandage the wound or fix into place securely. Inspecting the dressing daily to ensure the maggot infestation does not continue.

References

The Maggot Manual Jennifer Byrnes Wound Management Nurse Practitioner Royal Darwin Hospital January 2015

Case Study

- 90 year old lady
- Aged Care Facility
- Fungating tumour right shoulder
- High odour & exudate
- Myiasis infestation

Question: Explain why maggots should be removed from a wound?

- Distress to the patient, family & staff
- Continue to reinfest the wound
- Penetrate deeper and set up an inflammatory response
  - Granuloma
- Can cause further wound bacterial infection complications

Questions: True or False. Maggots can simply be plucked out of the wound with sterile forceps.

- False
- Hook and spines gripping the tissue making extraction difficult.
- Low oxygen levels by suffocation will kill the maggots first then flushed from the wound

Key Points

1. Maggot infestation of a wound is also known as myiasis
2. Myiasis is distressing for the patient, family & carers
3. Prompt & appropriate action is required to minimise distress and successfully treat the infestation
4. Treatment should involve suffocation, cooling the wound bed and flushing the maggots