More Than Just A Fly On The Wall

A Case of Nosocomial Myiasis in the Intensive Care Unit

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Warning: Some images may be disturbing to some viewers.
Viewer discretion is advised……..

Patient History

- 65 year old female admitted to ICU July 17th.
- CHF, A fib., pneumonia, acute on chronic RF, NSTEMI.
- Intubated on CPAP, sedated, vasopressors CRRT & enteral feeding tube.

Patient Day 4 ICU

- July 20th
- Numerous maggots evident in R nare & R eye medial; corner
- Consults made to ENT, ophthalmology, and ID.
- MRI, CT scan of chest & abdomin, ECHO, bronchoscopy.
Nosocomial Myiasis

- When the larvae of flies invade man the clinical picture is referred to as “myiasis”. When it occurs after hospitalization it is referred to as “nosocomial myiasis”.
- (Mielke, 1997).

Mielke (1997), reviewed 23 cases reported in the literature. One case was Canada (Josephson & Krajden 1993).

Sherman (2000), multicenter prospective observational study of urban & suburban patients infested with maggots. Total 45 cases, one from medical ICU.

Nosocomial Myiasis

- Obligatory myiasis. Larvae infest human host and are invasive.
- Accidental myiasis. Infestations are traceable to scavenger species.
- Facultative myiasis occurs when flies lay their eggs in decaying or malodorous open wounds or orifices.

Our Patient

- Lucilia illustris (green blow fly)
- Calliphoridae family.
- Based on the species & stage of development. The larvae took 2 days to develop.

Risk Factors & Environmental Factors

- Debilitation
- Impaired consciousness
- Blood or odors of decomposition
- Drainage tubes
- Respiratory intubation
- Comorbidities (PVD, diabetes)
- “Nursing neglect”

- Summer season
- Closed unit
- Access to outdoors

Closed Unit ICU
**Diagnostics**
- MRI of sinuses, lacrimal pharynx, brain.
- No sign of deep tissue invasion.
- Rhinoscopy
- Lavage & physical removal of larva is adequate.

**Treatment and Nursing Care**
- Nasal irrigation with 100mls half & half NS & H2O2 TID with deep oropharyngeal suction.
- Physical removal of maggots in eyes by ophthalmology.
- ENT: wash nasopharynx & sinuses.
- Remove nasoenteral feeding tube & insert oral feeding tube.
- Examine all patients
- Contact precautions
- Continue Cefotaxime
- Family support
- Crowd control

**Outcome**
- MRI no maggots seen. Slight thickening nasal mucosa.
- Erythema & pus eyes. Polysporin ordered. Developed contact dermatitis.
- Family follow-up
- Discharged home.

**Prevention**
- Controlling fly population.
- Reporting fly sightings in the unit.
- Reducing odors
- Controlling drainage
- Electrocuters mounted on doors
- Screens on windows
- IC & ID

**New Unit**

**References**