EPIDEMY OF BOVINE CUTANEOUS AND UTERINE BOTRYOMYCOYSIS AFTER CESAREAN SECTIONS

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XVth MEBC & 10th ECBHM Symposium
10-13th June, 2015 – Maribor, Slovenia
C-Sections in BBCB

- 99 % of calvings

- Principal complications
  - Peritonitis
  - Adhesions
  - Wound infections
Wound complications

- Dehiscence
- Abcess
- Hematoma

**Actinobacillosis in bovine caesarean sections**

A. de Kruif, P. Mijten, F. Haesebrouck, J. Hoorens, L. Devriese

*Veterinary Record (1992) 131, 414-415*

An infection with *Actinobacillus lignieresii*, which was spread by a veterinary surgeon, caused problems after caesarean sections in cows on several farms. The wounds became hard about six weeks after the operation, and a few weeks later small abscesses developed and later the wounds were covered with small and large granulomas. The general health of about 20 per cent of the affected cows was poor and in these cows multiple granulomas could be detected in the abdomen by rectal palpation.
History

- December 2014
Investigations

- About 6 weeks after C-section
- 13 herds: health status, housing, breeding, ...
- C-section technic and material used
  - No major errors & no immediate complications
  - REUSABLE
  - NO STERILIZATION
Clinical examination

- 318 cows (13 herds)
  - 90 (28%) parietal granulomatous lesions
  - BC not affected
Clinical examination

- Repeat breeding (shorter cycles)
- Uterine granuloma
  - 39 (12%): C-section horn (RP & US)
Anatomopathological examinations (biopsy)
Anatomopathological examination
# Bacteriological analysis

## WOUND BIOPSIES

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<tbody>
<tr>
<td><strong>Direct examination</strong> <em>(Actinobacillus, Actinomyces)</em></td>
<td>NEG</td>
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<tr>
<td><strong>Gram</strong></td>
<td>RBC +++</td>
<td>RBC +++</td>
<td>RBC +++</td>
<td>RBC +++ WBC ++</td>
<td>G- bacillus G+ bacillus</td>
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<tr>
<td><strong>Aerobic</strong></td>
<td><em>B. licheniformis</em></td>
<td><em>P. aeruginosa</em></td>
<td><em>S. chromogenes</em> <em>E. coli</em></td>
<td><em>P. aeruginosa</em></td>
<td><em>P. aeruginosa</em></td>
<td>Aeromonas sp.</td>
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<tr>
<td><strong>Anaerobic</strong></td>
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<td>C. perfringens F. necrophorum</td>
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<td><strong>Mycosis</strong></td>
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<tr>
<td><strong>Mycoplasma</strong></td>
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## UTERINE BIOPSY

|                  | NEG |
Histopathological examination

X 400
At the end...

- Compatible with Botryomycosis
  - chronic granulomatous infectious
  - not well understood
  - associated with low virulence pathogens, immune deficiency, surgery....
  - histological as diagnosis

- Origin remains unknown
  - C-section as a predisposing factor
  - Improvement of biosecurity (disposable)
THANK YOU!

KEEP CALM
AND
Go Red devils
Belgium