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EPIDEMIOLOGICAL STUDY OF SEMEN CONTAMINATION IN BOAR STUD

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Introduction

Despite the hygiene protocol and bacterial contamination control followed in boar studs, infection of semen doses are still considered a big problem, due to the developed resistance by many strains of bacteria. In this sense, we report a epidemiological study of semen doses contaminated by multiresistent strains.

Materials and Methods

Two Spanish boar studs which exhibited uncontrolled seminal doses contamination and with a short survival of sperm (less than 4 hours after the final dilution and less than 24 hours) were submitted to the present study. To find out the primary focus of the contamination, several samples were taken from susceptible places for microbiological growth: dummy, trough, drinking water, drinkers, boar injuries, floor, pen door, air from the laboratory, pens and changing room, air conditioned, soap, distilled water, glass material, extender, filling machine tube, seminal doses with different treatments.....etc.

To control the effects of this severe problem , both started using Dicol® till the final diagnosis and treatment of the problem. Semen of 30 boars were splitted into two groups. Group one standard procedure and the group two treated with Dicol® (collection extender: 150 milliliters of Dicol in the collection flask and

incubation during 40 minutes until final dilution). Samples of semen doses from all groups, swabs and plates were sent to a diagnostic lab in order to make bacteriological culture, isolation and identification.

Results and Discussion

The main bacteria related to the decrease in preservation ability of the seminal doses was a *Serratia marcescens* with , in our experience, special profile of antibiotic susceptibility (resistant to: Spect; Gent; Colist; Streptom; Neom; Apram; Cipro; Amik; Enrof; Kanam; Ceft; Penicil; Amox - Cl;).

Bacteriological isolation is as follows:

Uncountable for: water tap, water bath, sterilizer water, pens, laboratory, fences, boar prepuces, drinkers, dummy, trough, injury, hands of one worker and all seminal doses without Dicol®.

Countable (below 3000 c.f.u./ml)for: 12 seminal doses with Dicol®, changing room, pen lock, hand of one worker, tap, fan, table and flies.

Absence for: 18 seminal doses with Dicol®, collection jar , air conditioned, soap and packaging machine surface.

At the moment of presentation of this abstract, identification of swabs and plates is not available yet. Full final results will be presented in poster version.