ORCHITIS DUE TO STREPTOCOCCAL INFECTION IN A BOAR: A CASE REPORT

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Abstract

A case of orchitis due to streptococcal infection in a Landrace boar was reported. Gradual enlargement of the testes and sterility had been noticed during a period of 3 months. The animal was slaughtered and both testes were found necrosis. In addition, necrotic purulent exudation, serous and cystic formation were also noted on the left and right testes respectively. Bacteriological culture of the infected testes revealed streptococcal infection.

INTRODUCTION

Orchitis, a condition resulting in alterations in its sperm production, affects fertility in domestic animals but rarely occurs in swine. The causes may be bacterial, mycoplasma or viral but a common cause is traumatic injury. Testicular enlargement is usually observed and results in severe testicular fibrosis. The present report was an investigation on a boar with history of sterility problem together with abnormal enlargement of both testes.

CASE HISTORY

A 2.5 years old Landrace boar belonged to a commercial breeding farm, Potharam, Ratchaburi. During 3 months of August to October 1982, the boar displayed sign of enlargement of both testes with the left one was much bigger. Infertility problem arose at the beginning and subsequently become sterile as proved by all sows mated with the boar returned to estrus. The authors were called in on 2nd November 1982. On performing clinical examination, palpation was made on both testes and firm consistency was noted as shown in figure 1.

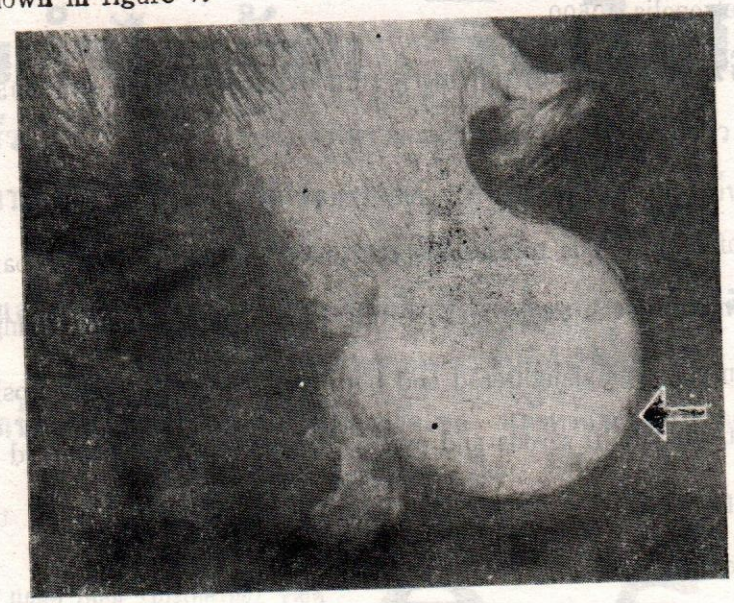


Figure 1. A Landrace boar with enlarge and firm testes.

Blood sample was taken and the boar was slaughtered with both testes removed and weighed. They were 18 and 6 kg and diameter of 40 and 25 cm for the left and right testes respectively as shown in figure 2.

Transverse and longitudinal cuts through both testes were made, necrosis of testicular tissue, purulent exudate, hemorrhagic areas and advanced fibrosis was found in the left testes (Fig. 2). While in the right testis only serous cysts with thick fibrosis capsule was manifested (Fig. 3). No testicular structure was evident in the left testes and only atrophic mass of the right testes was seen in the vicinity of fibrotic mass and cysts. Testicular tissue was then subjected to histopathological and bacteriological investigation.

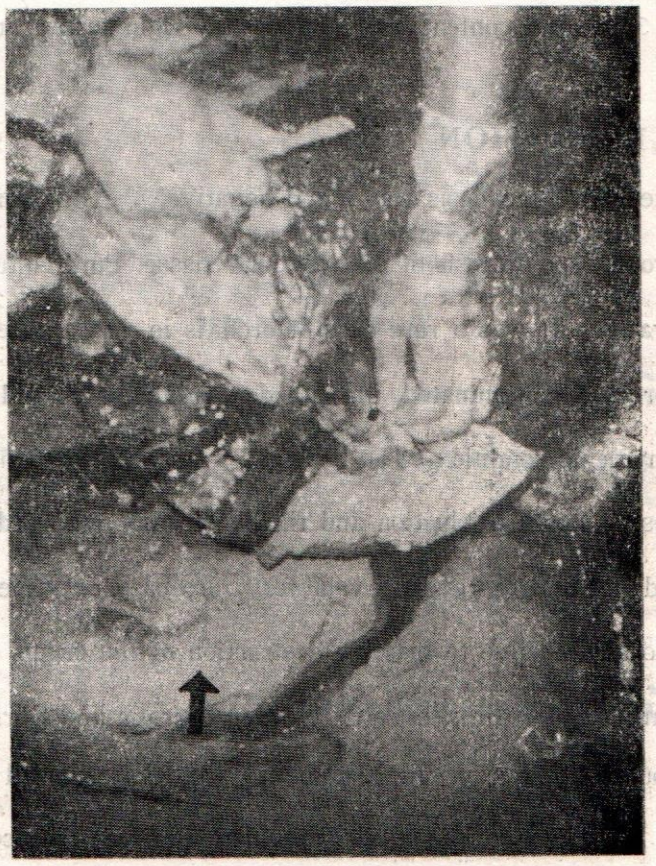


Figure 2. Necrosis and purulent contents (arrow) was found in the left testis.



Figure 3. Serous content was found in the right testis (arrow).

RESULT AND DISCUSSION

Blood test for brucellosis was found negative. Gross examination of both testes revealed atrophy and fibrosis of the testicular tissue. Pure culture of *Streptococcus spp.* was demonstrated. It was a rare case of orchitis in boar caused by streptococcus infection which perhaps contaminated through descending or ascending infection while mating with non hygienic condition. The enlarged testes due to purulent content which caused disturbances of sperm production and finally sterility was evident. The abnormal size of the affected left and right testes was very rare case. Outline of the epididymis was not possible to achieve due to massive destruction of the organ.

Histopathology of the left testis revealed necrotic and fibrinopurulent inflammation with pronounced fibrosis. The remained, right testis showed vacuolar degeneration and necrosis of the seminiferous tubules which showed absence of spermatozoa. The peritesticular tissue was necrotized with cystic formation.

The present case caused economic lose due to the fact that this was an imported boar. Furthermore, a large number of sows which has been mated with such boar were not conceived.

Acknowledgement

Dr. K. Maneechaiwong, Pfizer was acknowledged for presenting this case for our investigation.

มงคลสูตรคำฉันท์

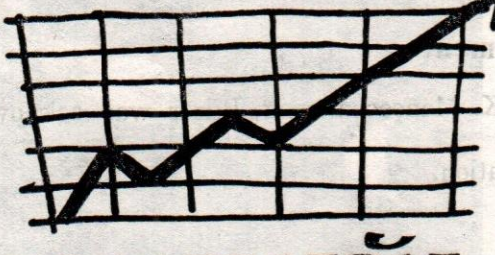
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ประกอบด้วย:

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บริษัท ANA จำกัด

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