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HEMORRHAGIC GASTROESOPHAGEAL ULCERATION BY PULMONARY INFECTION IN EXTRAHEPATIC CHOLESTATIC PIGS

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Abstract

We developed a biliary and pulmonary microbiologic study in 22 Large-White pigs that underwent bile-duct ligation in order to

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TABLE 1
Microorganisms in Lung Cultures of Bile Duct Ligated Pigs.

	%	n
<i>E. Coli</i>	57.2	8
<i>Streptococcus viridans</i> Group C	64.5	9
<i>Enterococcus</i>	35.4	5
<i>Proteus mirabilis</i>	14.5	2
<i>Staphylococcus aureus</i>	35.4	5
<i>Klebsiella P.</i>	7.1	1
<i>Enterobacter cloacae</i>	7.1	1
<i>Citrobacter Freundii</i>	7.1	1

The presence of intestinal germs in the bile and lungs suggest that there is an intestinal bacterial translocation which could be the cause of biliary and pulmonary infection and sepsis with multi-organic failure in this experimental model. In this case, the gastroesophageal ulceration could be considered as a stress ulcer.

However, bile duct ligation resulted in a complete incidence (100%) of gastric ulceration of the squamous portion of the esophagus of the pig's stomach (Watson *et al.*, 1985). The high percentage (88%) of animals with bilateral miliary lung abscesses makes it mandatory to consider pulmonary infection as a determining factor of the hemorrhagic complication of the gastroesophageal ulcer.

For this reason, the experimental model of extrahepatic cholestasis in the Large-White pig could be useful in the study of