

Jejunal Hemorrhage Syndrome

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Recently a syndrome of suddenly appearing, hemorrhagic blockage of the small intestine has begun to be reported in adult dairy cows. This newly emerging disease strikes sporadically in dairy herds usually affecting only a single cow at any particular time. Affected cows usually die. Many times the cows are found dead without any warning that they might have been sick. Others are found down and die within 24-36 hours. It seems to affect older cows in the first 100 days in milk. While this syndrome has been most often seen in the Midwest, it has also been reported in Idaho and California.

When found alive, the cows are usually down and reluctant to rise. They show typical signs of shock such as pale membranes, sunken eyes and poor capillary refill time. Many cows will demonstrate abdominal pain with grinding of teeth and moaning. If found standing, upon examination of the lower right flank, the abdominal cavity may appear to be fluid filled and sloshy sounding. Affected cows may tread or kick at their belly due to pain. Rectal examination may disclose signs of constipation, blood or clots and perhaps loops of gas-distended bowel. The prominent necropsy finding will be a segment of the jejunum or small intestine that is block by hemorrhage and blood clots. The segment may be up to 3 feet long. Fluid may accumulate ahead of the blockage and the bowel may be fairly empty after the blockage.

Cows that are found alive must be considered a medical emergency. Treatment is usually supportive and intended to reverse the signs of shock. Surgical attempts to remove the blockage due to the blood clots have been generally unsuccessful. The prognosis for recovery is poor or grave.

Veterinarians at several locations including the University of Minnesota and Iowa State University are studying the cause of this condition. While no definitive cause has been established, most investigators feel that *Clostridium perfringens*, type A is involved. Culture of necropsy specimens from dying cows has not found *Salmonella* or parasites to be present. Only a few cases have been positive for BVD. This particular Clostridial bacterium has the capability to produce toxins that could cause the intestinal blockage. For this bacterium to produce the syndrome, it must be present in the intestinal tract, abundant nutrients especially carbohydrates are needed for growth and sporulation, the intestinal tract motility must be slowed or stopped as might arise from eating a large meal, and finally the toxins have to be absorbed from the GI tract. Further research is being conducted in attempts to determine any feeding practices or ration components that might be risk factors for this condition.

For the present, jejunal hemorrhagic syndrome appears to be an emerging disease condition of mature dairy cows. The segmental intestinal obstruction results in sudden death or cows found gravely ill and dying within 24-36 hours. Affected cows when found alive show signs of shock and abdominal pain. Treatment is generally unrewarding. It is perhaps caused by presence of *Clostridium perfringens*, type A combined with nutritional factors.

Jejunal
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