As diagnosing these cows is time consuming, antibiotics are often given to all cows to treat the disease promptly. This is not the most efficient approach to treatment as it incurs more cost due to wasted milk, labour and treatments; and increases the potential for antimicrobial resistance over time.

The use of adjunctive treatments such as non-steroidal anti-inflammatory drugs (NSAIDs) is well-researched and has shown to have beneficial impacts on mastitis. Such treatments can be used at the time of mastitis detection.

As identifying pathogen type is needed to determine the right course of treatment, the diagnostic stage is one of the most important in the whole mastitis treatment process. Two of the most common tests used are purely for detecting mastitis in the first place, these are the Somatic Cell Count, and the California Mastitis Test. These tests both detect and measure (semi quantitatively), the number of somatic cells present, with an increased level indicating the presence of mastitis.

Advances in the technology of diagnostics has made it efficient to treat the many potential causes of mastitis effectively. A test that generates faster and more accurate results would become a gold standard in identifying the type of pathogen or certainly to identify gram positive cows. Current knowledge suggests that only infections caused by gram-positive bacteria benefit from antibiotic therapy.[2]

Having a quick and simple, effective diagnostic tool that could be conducted by even the most inexperienced user would be a game changer.

With growing pressure on farmers to reduce antimicrobial use, a tool which could successfully distinguish between gram-positive and gram-negative cows, would be a huge advantage in this regard. This would allow producers and veterinarians to treat the disease more effectively and not waste resources unnecessarily.

Progress must take place sooner rather than later as this problem of mastitis has been going on for years. With extensive scientific knowledge and diagnostic technologies now available, advancement in this area should be imminent.

Farmers and veterinarians depend on experts and key players in the animal health industry to innovate and revolutionise diagnostics and treatment methods to create better supply, decrease production cost, reduce the use of antibiotics, and maintain healthy and happy cows.

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