

# Clinical Examination of the Bovine Udder

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**M**ASTITIS, that scourge of diseases, which has possibly cost the cattle owner more than either tuberculosis or Bang's disease has received a great deal of publicity this last few years from the press, at farmers' and breeders' meetings and at veterinary conventions.

In the diagnosis, methods of treatment and control, the veterinarian can play an important part and it behooves us as veterinarians to make ourselves fully acquainted with the normal and abnormal conditions which confront us in the examination of the udder.

There are certain field tests which can be applied by testing the milk from each quarter by various chemical methods. These tests, while requiring a certain amount of technical skill and interpretation can be applied by a good reliable live stock owner or herdsman. However, at their best, they are only about 60 per cent reliable.

The pathological and bacteriological examination of milk samples are possibly the most reliable of any tests but they require a great deal of time and equipment and the resultant cost makes it almost impossible to test a herd in this manner.

Where then are the practitioners going to turn to diagnose mastitis? The clinical examination of the udder is the answer.

After the cow is milked, observations of the udder should be made, namely, as to size and conformation of the udder as a whole, and the relative sizes of the various quarters. By manual manipulation the supramammary lymph glands should be examined for size and for any induration which may have taken place. Each quarter of the udder should then be examined. Examination consists in the manipulation of the udder to ascertain the quality, size and possible abnormalities which may have occurred.

There are several varieties of normal udder, which for general purposes, may be divided into three classifications:

1. Quality pliable udder
2. Meaty udder
3. Fibrous udder

The quality udder may be described as one which is very pliable and elastic and shows no sign of induration. It should be well balanced.

The meaty udder is one which is quite pliable but lacks the elasticity of the udder formerly described.

The fibrous udder is found in older cows and ones which have been forced to the limit of milk production.

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The abnormalities confronted in mastitis are many and varied. Changes in the udder may vary from a small lesion in one quarter to a complete induration of the whole udder. Lesions met with in mastitis may be only about one inch in diameter and should be viewed with suspicion.

Other abnormalities of the udder may be an indurated condition of one or more quarters. This induration may be accompanied with swelling or in the case of conditions where the quarter has not been functioning for some time, there may be a marked atrophy.

In the case of acute mastitis there is a marked swelling in the quarter as well as a change in the appearance of the milk.

One is often confronted with border-line cases, that is, cases that show a slight induration in an old cow. Whether this cow should be placed in the third classification of normal udders, or as a mastitis case, is difficult to decide, and the practitioner must weigh all the facts regarding this cow, namely, her age, milk production, history of any abnormality in the milk, or variances in milk production. In these cases, the use of the chemical, bacteriological or microscopic examinations assist in arriving at a diagnosis.

On the whole, it behooves every practitioner to make himself thoroughly acquainted with normal and abnormal conditions as met with in the examination of the bovine udder.



## Well Known Officers Retire

WE understand that Sir Arthur Olver, Animal Husbandry Expert to the Imperial Council of Agricultural Research, India will retire on the 7th of May of this year. He will be succeeded by Mr. Frank Ware, Director of the Imperial Veterinary Research Institute. We also understand that Sir John Kelland, the Chief Veterinary Officer of the Ministry of Agriculture of Great Britain, will retire on the 1st June. He will be succeeded by Mr. D. A. E. Cabot. Both Sir Arthur Olver and Sir John Kelland have many personal and professional friends in Canada and their best wishes for a long and useful retirement go to them both.



## Snake Venom For Surface Bleeding

SNAKE venom is now being used for the treatment of surface bleeding and 1 : 5000 sterile solution of *Fer-de-lance* venom is manufactured for this condition. Its haemostatic action is complementary to *Moccasin* venom which is administered by injection to strengthen the capillary walls; unlike *Fer-de-lance* venom it has no specific blood-coagulatory effect.