

2024 Batch-Lecture No. 7

EXAMINATION FOR PREGNANCY

1. Cyesiognosis: It means diagnosis of pregnancy.

IMPORTANCE OF EARLY PREGNANCY DIAGNOSIS:

2. An accurate, early diagnosis of pregnancy in the cow and mare is essential to a successful breeding program because successful programs for the management of infertility in cattle and horses are based on early and accurate pregnancy diagnosis.
3. In addition to this, one should be able to diagnose the duration of pregnancy with accuracy to within several days to a week or two depending upon the stage of pregnancy.
4. Pregnancy should be able to be differentiated from other conditions such as pyometra, mummification of the foetus, mucometra, foetal maceration, tumors, and metritis.

PREGNANCY DIAGNOSIS IN THE COW:

External indications of pregnancy include:

1. Service by a bull or by artificial insemination,
2. Cessation of estrum or heat periods,
3. Post estrous bleeding,
4. Increase in size of abdomen,
5. Increase in size and development of udder,
6. Cows become quieter and move more cautiously and slowly,
7. Increase in body weight,
8. Relaxation of pelvic ligaments,
9. Edema and relaxation of vulva,
10. Ballottement of foetus through abdomen,
11. Auscultation of foetal heart.

1. Service by a bull or by artificial insemination:

Occasionally this information is not known either through error, lack of records or accidental breeding.

2. Cessation of estrum or heat periods:

1. It is fairly accurate if the herdsman observes animals closely for estrum, but is not infallible as
 - i. The herdsman may not observe signs of estrum or
 - ii. The animal may not exhibit signs of estrum or
 - iii. Early embryonic deaths or abortion may occur
 - iv. Zemzanis and Belling reported that 15 percent or more of cattle not observed in estrous after service were not pregnant when examined 60 days or so after service.
 - v. Pathologic changes may occur in the uterus such as pyometra or in the ovaries, such as cysts, resulting in failure of estrum.
 - vi. Some cows may exhibit signs of estrum during pregnancy.
3. **Post estrous bleeding:**
 1. Post oestrus bleeding, menstruation, or the passage of blood and mucus, 24 to 48 hours after service is cited by some as an indications that conception did not occur.
 2. Reports indicated that about 50 to 60 % of cows and 75 to 85 % of heifers showed some bleeding at the vulva after estrum.
 3. When careful studies have been made there was found to be of no relationship between post estrous bleeding and conception.
4. **INCREASE IN SIZE OF ABDOMEN:**
 1. In advanced pregnancy, the abdomen, of cattle tends to increase in size but this is not as reliable an indication of pregnancy in uniparous animals as it is in the multiparous species.
5. **INCREASE IN SIZE AND DEVELOPMENT OF UDDER:**
 1. The udders of heifers at 4 to 5 months of pregnancy begin to increase in size and development.
 2. In older pluriparous cows the enlargement and edema of the udder is often not evident until the final 1 to 4 weeks of pregnancy.
 6. Cows become quieter and move more slowly and carefully as pregnancy advances, especially the last few weeks.
 7. There is a tendency for an increase in body weight.
8. **RELAXATION OF PELVIC LIGAMENTS:**

The pelvic ligaments begin a progressive relaxation, and in thin animals a marked sinking of the croup occurs.

9. EDEMA AND RELAXATION OF THE VULVA:

Edema and relaxation of the vulva is noticeable the last few weeks of pregnancy.

10. BALLOTTMENT OF FOETUS:

1. The foetus usually may be balloted or its movements observed through the abdominal wall after the sixth month of pregnancy.
2. Occasionally in some thin animals where the foetus lies close to the wall, this may be done as early as the fifth month of gestation.
3. In fat animals this may not be possible until the eighth or ninth month of pregnancy.
4. Depending upon the size of the foetus, the condition of the cow and the size and degree of fullness of the abdomen, the foetus can be balloted-
 - i. In 5 % or less of pregnant dairy cows at 5th month of pregnancy,
 - ii. 10 to 50 % at 6 months,
 - iii. 70 to 80 % at 7 months,
 - iv. 80 to 90 % at 8 months,
 - v. Over 90 % at 9 months.
5. Abdominal ballottment of the foetus is easy in the cow because of the relaxed, flaccid abdominal walls.
6. The fist is pushed in an intermittent manner in a dorsal medial direction deeply into the lower right abdominal wall.
7. If the foetus is balloted, it is felt as a large hard solid object suspended or floating in the softer structures of the abdomen, such as the uterus, uterine contents and the abdominal viscera.
8. The more advanced the pregnancy or the larger the foetus, the more dorsal in the right flank region the foetus may be balloted.

11. AUSCULTATION OF FOETAL HEART:

1. Foetal heart may be auscultated in the right flank region from the sixth to seventh month of pregnancy to term only with great difficulty due to the thick abdominal walls and viscera and the difficulty of obtaining a sufficiently quiet location.
2. By comparison with other techniques, it is not practical in the cow as there is too much chance for error.

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3. Foetal electrocardiography has been used to study the foetal heart and as an aid in the diagnosis of twin pregnancy and foetal mummification after the fifth month of pregnancy in cattle.