

## Treatment of Anoestrus Cows with Diluted Logul's Iodine and Massage on Reproductive Organs-uncontrolled Case Study

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**Abstract:** Study on the reproductive disorders was carried out on 20 cows in order to relieve cows from suffering of the diseases in a cheaper way, as the diseases were the main problem in the study areas. Massage on ovaries by Palpation method was successfully applied, Wash the uterus and intraveinuous injection of 30c.c 10 times diluted logul's Iodine at two weeks interval for treatment of affected cows suffering from anoestrus. Use of logule's Iodine and palpative massage on ovaries, rupture of the mature follicles, was very effective and less expensive. It would be the profitable method for the farmers. In case of massages and Iodine treatment, the conception rate was high (81%).

**Key words:** Ovarian function, intraveinuous, subcutaneous

### INTRODUCTION

The study was conducted on 20 cows, which were anoestrus. The animals suffered from malnutrition, mineral deficiencies and were mostly cachectic with stunted growth rate, sometimes with delayed ovulation. The study was conducted in three villages, Joangaon, Rator and Banglagorh in Pirganj Upazilla, Distirc Thakurgaon, Bangladesh<sup>[1]</sup> reported that early research confirmed that nutrition played an important role in reproduction, but in most cases severe nutritional deficiencies were required to cause reproductive problems. Therefore, the recommendation has been to feed cows for top production. Feeding programs as the cause of breeding problems in dairy cows. Deficiencies of various trace minerals, inadequate vitamin intakes, energy-protein imbalances and excessive protein intakes are mentioned as contributors to infertility and poor reproductive performance and they also said that Reproduction is influenced through iodine's action on the thyroid gland. Inadequate thyroid function reduces conception rate and ovarian activity. Thus, iodine deficiency impairs reproduction and iodine supplementation has been recommended when necessary to insure that cows consume 15-20 mg of iodine each day. Recently, the effects of excessive iodine intakes have been recognized.

If the animals suffer from Iodine deficiency then ovary become atrophy and decrease the milk production and there will be decrease calcium absorption capacity i.e. low calcium and high phosphorus in blood. Iodine acts on the thyroid gland. Metabolic activity of body also decreases, slow growth due to Iodine deficiency. If we supply iodine, increase the function of thyroid gland, maintain the balance of Ca and P level, increase metabolic

activity of body, body weight also and animal come in heat early. So hormone will be less effective in Iodine deficient cow. The mechanism by which massage brings back cows ovary to function is not clearly understood, but is probably the result of activation of intrinsic ovarian factors<sup>[2,3]</sup> and enhancement of blood circulation<sup>[4]</sup>.

### MATERIALS AND METHODS

20 animals were selected in a group, named as experimental group. The cows were selected as same age, sex and same breed. The cows are treated with 10 times diluted Logul's Iodine and Massage on the Ovaries by rectal palpation with hand and ruptured the follicles, washed the uterus with 10times diluted Logul's Iodine 30 c.c i.v. and 10 c.c s/c rout ,14 days interval . The health status of the animals also improved after giving Logul's Iodine and satisfactory bodyweight gained. After heat A.I was done. If the animal would not come in heat, 2nd dose/ 3rd dose of Logul's Iodine was given.

### RESULTS AND DISCUSSION

The cows came in heat (60%) within 5-10 days after 1st dose of injection of Logul's Iodine (10 times diluted), if the animal would not come in heat after 1st injection then 2nd and 3rd dose injection were done. The animals were come in heat within 15-30 days. The body condition was improved and also body weight increased day by day due to increased the metabolic activity of the body. The conception rate was 81%. As the body condition improved, milk production also increased, body weight gained also satisfactory level due to Iodine action. The most effective treatment of anoestrus cows were

with Lugol's solution and uterine wash as well as ovarian massage could be considered. Significant differences ( $p=0.05$ ) in the oestrus rate were found (80.6 and 80.0%, respectively)<sup>[5]</sup>.

The uterine and ovarian massage is a simple and relatively viable treatment method that should be considered especially when dealing with economically disadvantaged cattle farmers. While a single application of GnRH injection proved ineffective and should be discouraged. Alternative methods of treatment such as uterine and ovarian massage or Lugol's solution should be considered when necessary.

The problem of postpartum infertility due to OA is one of the well known drawbacks in cattle production, resulting in substantial financial losses due to prolongation of the service period and culling<sup>[6-8]</sup>. Ovarian response to Lugol's solution treatment was high in this trial and confirms earlier findings and assertion about the profitability of intrauterine Lugol's solution treatment of OA<sup>[4-9]</sup>. Therefore, Lugol's solution should be one of the drugs of choice for OA treatment. The enhanced uterine blood circulation might also influence ovarian activity<sup>[10]</sup>.

Uterine and ovarian massage is the cheapest since no drugs are used. The efficacy of this method in treating reproductive disorders has been reported by Max<sup>[11]</sup>. The high first service and total conception rates observed in this group tend to question the wisdom of using costly methods in treating ovarian dysfunction cases when a cheaper and less laborious massage method is likewise effective.

Max<sup>[11]</sup> concluded, ovarian follicles puncture directly and indirect effects folliculo genesis and is incorporated into breeding programs.

Gustafsson and Emanuelson<sup>[12]</sup> reported that the repeat breeding syndrome is a multifactorial problem involving a number of extrinsic factors as well as intrinsic factors coupled to the individual animal.

Anoestrus cows were come in heat (60%) after 1st dose injection, after 2nd and 3rd consecutive massage of uterus and wash of the uterus with of logul's Iodine.

### CONCLUSIONS

Treatment of cows suffering from anoestrus came in heat after application of ten times diluted Logul's Iodine through intravenous injection and intra uterine wash, with 10 times diluted logule's Iodine and conception rate was 81%. Iodine was also highly effective with palpative-massage on the ovaries, rupture of the mature follicles. Logul's Iodine was very effective satisfactory body weight gained and increased milk

production. Palpative massage on ovary, rupture of the mature follicles, is less expensive method where as hormonal treatment is expensive. It is the profitable method for the farmers and economically safe. So we can use ten times diluted Logul's Iodine subcutaneously and intravenously and also the technique of palpative-massage on ovaries for increasing the conception rate of cow.

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