Using of Ultrasound in diagnosis of repeat breeding in Dromedary Camels.

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Abstract:

Repeat breeding one of the most common problems in reproduction of dromedary camel. On one hand most of Bedouins dealing with it by traditional methods. However the results and prognosis seem to be not promising. On another hand most of veterinarians and practitioner treat it by hormones whatever GnRH , Prostaglandin, Progesterone analogs without accurate diagnosis of genitalia. So using of ultrasound can overcome miss diagnosis. In this trial we used ultrasound (B-mode) system (Rectal probe) in diagnosis of 6 Camels show a history of repeat breeding for long time differ from case to case. According to this diagnosis we will begin a course of treatment and show results of our trial.

Key words.

Ultra sound in Camel, Repeat breeding in camels, Camel reproduction.

Introduction:

Estrus cycle of Camels different than the other ruminant because there are wide variety of duration in each stage of estrus specially diestrus phase that because the ovulation in Camel is induced by bull camel during mating. Also the estrus in camel depends on seasonality in which the ovary activity begin to increase in Gulf area in November and continue to February or sometimes to March, otherwise ovary goes in long diestrus.

We depend in this trial on case history and using of ultrasound to diagnosis of the structures on the ovary so we can use the proper program of treatment, then we will evaluate the results according to diagnosis.

We have a 6 Camels suffering from repeat breading from long time. The owner using hormonal treatment plus supportive treatment of minerals and vitamins such as vitamin E, Selenium, Phosphorus (R/Catosal). Moreover they used also traditional treatment but with no response.

This trial will continue for several weeks to follow up the results of our program of treatment till we can evaluate of this trial.

Material & Methods:

Using of (Chison 9300) ultrasound machine with rectal probe.



Figure 1 : Chison 9300 vet Ultrasound.

Make scanning of genitalia of 6 camels and recording structures on the ovary and uterus specially left side because that is the side where pregnancy occurs inside.

Each camel has a name so recording will be one by name.

Results & Discussion:

Most of cases recording multiple growing follicle biggest one within average of 6 – 16 mm and (e.g. Boyda). Another case (Al-Omaya) shows Graffian follicle with pervious case history of signs of estrus one day before and owner let bull camel inseminate it but there is no ovulation over than 24 hours post mating. That suspected due to the LH not reach to the beak that allow ovulation occur which may be physiological due to we are out of season (in September).

2 shy camels show signs of metritis in which appear turbid vaginal secretion during back racking and that appear clearly in ultrasound image in some cases such as (Al-Omaya).

Here are some images that show structures on ovary and its size also horn with signs of endometritis in which appear non echo-genic appears black and grey colored that indicate inflammatory secretions.

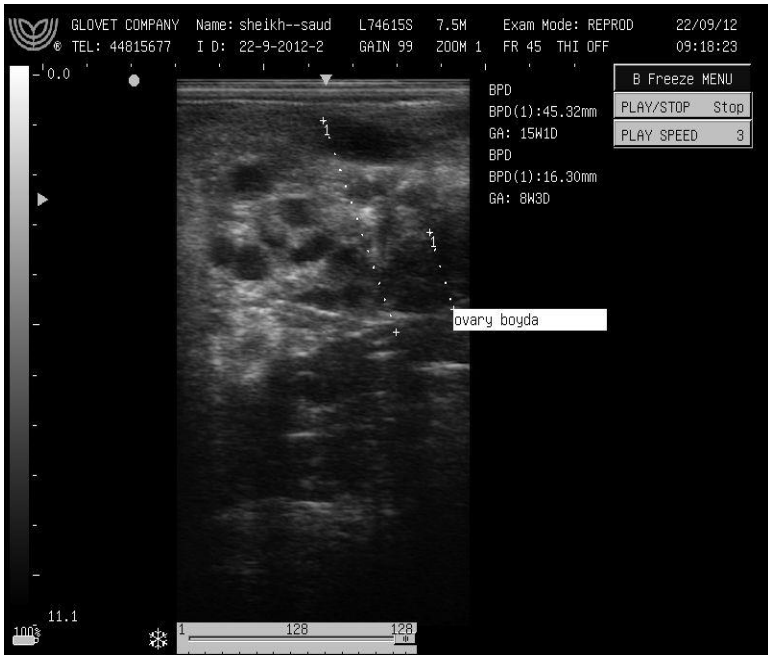


Figure 2 Ovary show different size of growing follicle

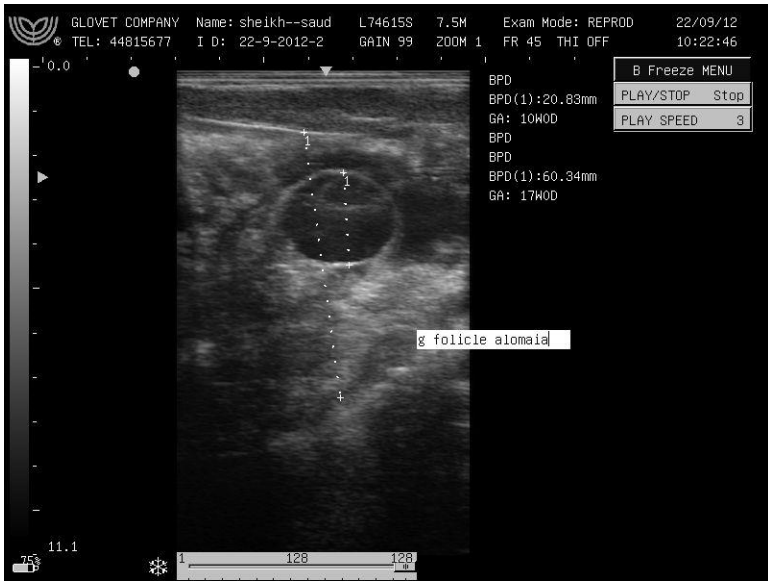


Figure 3 Ovary Shows Graffian Follicle (20.83 mm).

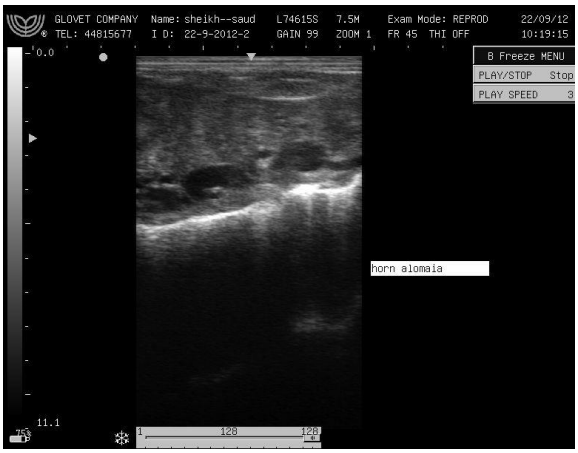


Figure 4 Lift Horn of Shy Camel shows inflammatory secretion in its lumen.



Figure 5 Left Normal Horn of Uterus.

Our program of treatment will depends on main points:

1- Treatment of metritis using (R/Lotagen) solution 150ml. 2 times with one week apart.

2- Applying of intra vaginal sponge containing PMSG for 15 days then injection of 1000 IU PMSG hormone (R/Syncropart) one day before removing of sponge.

3- Try to make insemination the second day after removal of sponge for 3 concessive days.

4- injection of (R/Receptal) 10 ml before mating.

After applying program of treatment check on pregnancy using ultrasound after 30 days post mating. Then will see the result to evaluate the trial.

Conclusion:

Using of ultrasonography can help in detection the causes of repeat breeding of camel specially rectal palpation in camel more difficult than cattle to detect ovarian structures.

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