



The Effect of Ferula Assafoetida Hanging on the Morphometric Changes of the Reproductive Organs of the Rocks

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ABSTRACT

In this article, the morphometric changes of the reproductive organs in the postnatal ontogeny of Karakol cows under the influence of Ferula assafoetida fertility are presented.

Keywords:

Ferula assafoetida, carob rocks, ovary, uterus, horn of the uterus.

Relevance of the study. Today, there is little evidence of the importance of using natural medicines for the prevention and treatment of various diseases in livestock and poultry. In order to develop this industry, many measures are being developed by our Republic, in particular, the President's decision of April 27, 2022, PQ-116 including Most species of sedge hang together with large grasses growing in mountain and sub-mountain regions. Researches were conducted by scientists on the Chotkal Reserve of the Western Tyanshan Mountains and the Jungor ferula hanging in the Tashkent region and the Tatar ferula hanging in the Bukhara region [3,4,5]. As a result of the interest of many researchers in terpenoids contained in the fruit of Ferula assafoetida, it has been proven that they, like other natural compounds, have specific effects on humans, animals and microorganisms. In addition, in addition to other specific properties, it was found that it has estrogenic properties, and estrogenic agents such as panoferol and tefestrol were extracted from it [1,6]. The root of Ferula assafoetida is considered medicinal,

Tefestrol and Zofarol drugs are obtained from it, and they are used in gynecology to treat ovarian hypofunction, amenorrhea, impotence, climax disorders and other diseases [5]. According to Yu.M. Malofeev, E.K. Tokaev (2005), rapid involutinal changes occur in the uterus wall during the postpartum period of cows, and it is directed to faster preparation for the next pregnancy. On the 30th day after the birth of the animal, it is observed that the reproductive organs are completely restored, but the uterus does not return to its initial state by 10-15% [2]. Object and methods of research. Scientific research was carried out on ovules and uterus taken from 12, 18, 36 month-old black sheep reared in Nurota district, Navoi region. Young, clinically healthy and moderately obese animals were selected for sampling. For the object of inspection, the egg yolk and ovary of the young blackbirds were tak

Research results. It was noted that the anatomical dimensions of the female reproductive organs of wild boars that

consumed *Ferula assafoetida* exhibit specific characteristics and dynamics of change at different stages of postnatal development in connection with their function and physiological processes that take place in them. It was observed that the absolute indicators of the length of the egg path have a certain dynamic of change in the physiological stages after the birth of the animal. The absolute length of the left ovary was 13.2 cm at 12 months, and 15.3 cm at 18 months. At the 36-month stage of postnatal development, this

indicator of the left fallopian tube reached the highest level compared to those at the lower stage of development, that is, its size was equal to 16.0 cm. The absolute indicator of the length of the oviduct of Karakol cows was 13.6 cm at 12 months of postnatal development, and 15.8 cm at 18 months of postnatal development. At the stage of 36 months, this indicator of the right fallopian tube reached the highest level compared to those of the lower stage, that is, its size was equal to 16.1 cm

Absolute indicators of the length of the ovary and uterine horn in the postnatal ontogeny of Karakol goats (cm) Absolute indicators of the diameter of the head of the uterine horn and the thickness of its wall in the postnatal ontogeny of Karakol goats (cm)

| Ege | Egg yolk | | Uterine horn | |
|----------|----------|----------|--------------|----------|
| | Left | Right | Left | Right |
| | M±m | M±m | M±m | M±m |
| 12 month | 13,2±0,3 | 13,6±0,3 | 8,8±0,3 | 8,7±0,2 |
| 18 month | 15,3±0,2 | 15,8±0,2 | 13,2±0,3 | 13,8±0,3 |
| 36 month | 16,0±0,2 | 16,4±0,3 | 15,0±0,1 | 16,1±0,3 |

It is observed that the diameter of the left side of the head of the middle part of the uterine horns of Karakol goats increases this indicator to 0.8 cm from the 12th month of postnatal ontogeny. At the 18-month stage of postnatal

ontogenesis, this size of the uterine horn did not change at all compared to the 12-month stage, and at the 36-month stage, it showed the highest value, i.e. 0.95 cm.

Absolute indicators of the diameter of the head of the uterine horn and the thickness of its wall in the postnatal ontogeny of Karakol goats (cm)

| Ege | The diameter of the head of the middle part. | | The thickness of the wall of the middle part | |
|----------|--|-----------|--|-----------|
| | Left | Right | Left | Right |
| | M±m | M±m | M±m | M±m |
| 12 month | 0,8±0,02 | 0,85±0,01 | 0,4±0,02 | 0,42±0,02 |
| 18 month | 0,8±0,02 | 0,9±0,02 | 0,44±0,03 | 0,48±0,03 |
| 36 month | 0,95±0,02 | 0,98±0,03 | 0,55±0,01 | 0,58±0,03 |

| Ege | Egg yolk | | Uterine horn | |
|----------|----------|----------|--------------|----------|
| | Left | Right | Left | Right |
| | M±m | M±m | M±m | M±m |
| 12 month | 13,2±0,3 | 13,6±0,3 | 8,8±0,3 | 8,7±0,2 |
| 18 month | 15,3±0,2 | 15,8±0,2 | 13,2±0,3 | 13,8±0,3 |
| 36 month | 16,0±0,2 | 16,4±0,3 | 15,0±0,1 | 16,1±0,3 |

It was found that the diameter of the head of the middle part of the uterine horns increases to 0.85 cm in 12 months of postnatal development, this indicator increases to 0.9 cm in 18-month-old animals, and at 36 months, it increases to the highest level, that is, it reaches 0.98 cm. The absolute index of the thickness of the wall of the middle part of the left uterine horn of Karakol goats was 0.4 cm at 12 months of postnatal ontogenesis, 0.44 cm at 18 months, and the highest index at 36 months was 0.55 cm, like other sizes of the uterine horn. If the thickness of the wall of the middle part of the uterine horn was equal to 0.42 cm at the age of 12 months and 0.48 cm at the age of 18 months, the absolute size of the thickness of the wall of the middle part of the uterine horn was the highest in 36-month-old animals. It was observed to reach 0.58 cm.

Conclusion. Based on the anatomical structure and physiological characteristics of the uterus, it is appropriate to take into account the specific dynamics of changes in different physiological stages of postnatal ontogenesis of the absolute parameters of the uterus and fallopian tubes of Karakol sheep under the influence of the *Ferula assafoetida* plant.

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