

for sedation and immobilizing of dogs in ultrasonic teeth cleaning.

With this purpose we created 2 groups of dogs having 5 animals in each group. The groups have been filled in with the animals based on admission into the clinic. In the experimental group, "XILAFARM" was administered intramuscularly at a dose of 0.5-1.5 ml per 10 kg of animal weight. In the controlled group, the medicine "XILAVET" was administered intramuscularly at a dose of 0.5-1.5 ml per 10 kg. If it was necessary the dogs in both experimental and controlled groups received a local anesthetic - 2% solution of Novocain. All animals before the administration of medicines were kept on a hunger diet regime. After the administration of the medicine the clinical examination was done for them and the procedure of ultrasound cleaning of the teeth was carried out simultaneously. As a result of our studies we established the following facts: in the experimental group after administration for dogs of xylopharm after 5-6 minutes a slight vomiting reflex was observed, then the animals calmed down; the breathing became deeper and less frequent; the body temperature was at the lower limit; the muscle relaxation was expressed. During the procedure the dogs of the experimental group showed no anxiety and the immobilization lasted depending on the breed of the dogs in the interval from 30 to 40 minutes. In the controlled group after administration of xylivet in all animals an obvious vomiting reflex was observed after 5 to 6 minutes post injection; the breathing became deeper and less frequent; the body temperature was at the lower limit; the muscle relaxation was weakly expressed. During the cleaning teeth procedure 3 animals had anxiety and 1 animal had repeated vomiting reflex. Additionally for 2 animals of this group xylivet was also injected to finalize the procedure. Immobilization of the animals in the controlled group lasted on average 25 - 30 minutes.

Our researches have established that during the ultrasonic cleaning of teeth in dogs, in order to immobilize the animals it is better to apply the medicine "KSILAFARM", as it showed better muscle relaxant properties with obvious calming.

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## **HEPATITIS E VIRUSIS**

Hepatitis E virus is endemic in developing countries. Several outbreaks have been reported from South Asia, Middle East, northern Africa, and Central Asia. Outbreaks usually occur after rainy seasons, flooding and recession of floodwaters. They have also been associated with poor hygiene and unsafe water supplies. An epidemic of hepatitis E infecting 3.827 people occurred in Islamabad after a water treatment plant broke down. Young to middle aged individuals between 15 and 40 years of age have the

highest attack rates. Hepatitis E is especially severe in pregnancy. The attack rates in pregnant females have been reported from 17% to 40%. Pregnant females in the second and third trimesters exhibit a case fatality rate of 20%. Frequency of abortions, stillbirths and neonatal deaths is also increased in pregnant women with hepatitis infection. Altered immune response, hormonal changes associated with pregnancy and malnutrition have been postulated as the possible factors responsible for the increased severity of the disease during pregnancy. HEV is a RNA virus, provisionally classified in the family Caliciviridae, genus Calicivirus. They are classified in 5 genotypes: genotype-I (Asia-Africa), genotype-II (United States), genotype-III (Mexico), genotype IV (Beijing, China) and genotype V (Europe). HEV is transmitted almost exclusively by the fecal-oral route. Person to person transmission appears to be distinctly uncommon. Vertical transmission of HEV infection from mother to infant is known to occur.

Detection of HEV antibodies in the sera of pigs, sheep, cattle, rodents and a lot of other animals in endemic areas raise a possibility of zoonosis for HEV. Pigs and production from pigs – are the most important animals in this possibility. Consumption of water sources by such domestic animals could also contribute to persistence of disease in endemic areas. HEV genome can also be detected in serum or stool samples using RT-PCR, which has recently been modified to increase the sensitivity and reproducibility. The most commonly used method is the detection of HEV antigens in serum via ELISA.

Prevention of hepatitis E depends primarily on providing clean water and proper sewage disposal. Boiling water before consumption, avoiding uncooked foods and vegetables and hand washing before meals appears to be the best prophylaxis [45]. The protective role of anti HEV antibodies is not certain. The occurrence of HEV epidemics in disease endemic areas suggests that either anti HEV antibody is not fully protective or that antibody levels decline with time. Immunoglobulins have been tried but their efficacy is not clear. Experimental vaccines for HEV have been developed and their effectiveness is being investigated.

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### **MORTALITY PERCENTAGE OF SRI LANKAN LEOPARDS (PANTHERA PARDUS KOTIYA)**

The Sri Lankan leopard (*Panthera pardus kotiya*) has been classified as endangered by the IUCN (International Union for Conservation of Nature) and is a leopard subspecies that is native to Sri Lanka. The population of leopards which is not larger than 250 animals is declining due to a number of reasons which includes poaching and also the human-leopard conflict.