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УСОВЕРШЕНСТВОВАНИЕ КУЛЬТИВИРОВАНИЕ НОВЫХ ШТАММОВ УРОБАКТЕРИЙ БЕЗБЕЛКОВОЙ МИНЕРАЛЬНОЙ СРЕДЕ

Обобщая итоги исследования, следует подчеркнуть, что математические методы планирования экспериментов позволяют увеличение урожая клеток и сокращение сроков культивирования уробактерий, следовательно, дают возможность в приготовлении из них микробиотиков, применяемых в птицеводстве в качестве стимуляторов роста (так как они богаты физиологически активными веществами) с целью получения дополнительной продукции.

Ключевые слова: уробактерия, мочевина, фермент, белок, биомасса, физиология, перспективный, азот, амияк, микроб, витамин, аминокислот, антибактерий, ферментация, среда Рубенчика, модифицированные варианты,компоненты, оптимальный, серия, фактор.

Ahmet A., Myktybayeva R.Zh.

DEVELOPMENT NEW STAMM UROBACTERIES GROWING WITHOUT PROTEINS

Results scientific work has shown mathemetical methods for planning microbial cell growing and regarding time urobacteries has being, poultry farming avian growing process we consider for additional product we produce microbitics (they are has physiologic solutions).

Key words: Urobacteria, mochevina, ferment, protein, aminocites, biomasses, physiology, perspective,nutrites, amino, microb, vitamin, aminocislotes, antibakteries, formentation, Rubinichek core, modified variants, components, optimal, series, factor.

UTQ 619:616.36:636.7

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X-RAY EXAMINATION OF RABBITS AND DOGS' LIVER AND SPLEEN BY USING RADIOPAQUE AGENTS BILIGRAFIN

Annotation

In an article there are detalis of radiopaque researel of rabbits and dogs' liver and spleen. Researches showed that liligratina contrasts differently on parenchyma organs depending on doses optimal diagnostic dose is 3,0 ml/kg.

Keywords: x- ray diffraction, liver, hepatits, radiopaque substances, biligrafin, bilirubin, x-ray projection, rabbit, dog, spleen

Introduction

Liver - the body's central laboratory that performs more than five hundred metabolic functions. It participates in all the metabolic processes of proteins, carbohydrates, fats, vitamins, macro-minerals, enzymes, and is the main body to neutralize and eliminate toxins from the body of endogenous and exogenous origin and products of metabolism. Abnormal liver function entails a number of pathological changes in the body that leads to the death [1-5].

One method of in vivo diagnosis of morphological structure, vascular architectonics of functional activity gepatolienalny system is X-ray method with simultaneous introduction of various targeted contrast medi X-ray study is one of the main methods to obtain objective information about the functional status of the various organs and systems necessary to establish the correct diagnosis and precise localization of the identified changes, and monitor the effectiveness of treatment. Due to the fact that the native contrast of the gastrointestinal tract, liver, spleen insufficient, to improve its use opacifying agents.a (RCM). This fact is due to the lack of radiopacity natural anatomical structures of the system.

Materials and methods

In order to study the properties of a radiopaque agent biligrafin X-ray examination of the liver and spleen, experiments were conducted on two types of laboratory animals: rabbits and dogs. In the experiments, the animals were injected biligrafin in different doses and then, within a few days watching its pharmacodynamics using radiography.

Results and discussion

X-rayexaminations of the liver and spleen in rabbits Intravenous doses biligrafina 1.0-10.0 ml / kg into rabbits yielded 18 different picture radiographic contrasting liver and spleen. Satisfactory spleen opacification occurred at a dose of 2.0 ml / kg, good - at 3.0 ml / kg and excellent - at 5.0 mL / kg or more. In rabbits, spleen weight was small relative to the total weight of the body had an elongated shape, oblique location and the surrounding low back surface of the stomach. Starting in the income of the drug through the spleen was detected 15 min after injection biligrafina.

Intensive contrasting spleen expressed high density was found in 40-50 min. During this period, the contour of the spleen becomes clearly defined, and PKB diffusely infiltrates the parenchyma of the body. Contrasting spleen continued to average 1.5 hr. At a dose of 10.0 ml / kg - to three days.

The rabbits were observed in X-ray contrast enhancement of the liver in 40-50 minutes. at a dose of 3.0 ml / kg and more were found beginning contrasting the liver and 1.5 - 2 hours radiopaque good image of the body with the differentiation and detail lobed structure. In subsequent periods of its share structure reveals yet more clearly (Figure). Well were visible boundaries and contours of the body. But at the same time it must be said that the drug diffusely exciting and absorbing fabric, so it was located evenly throughout the liver parenchyma. Some of its anatomical elements had no clear differentiation.

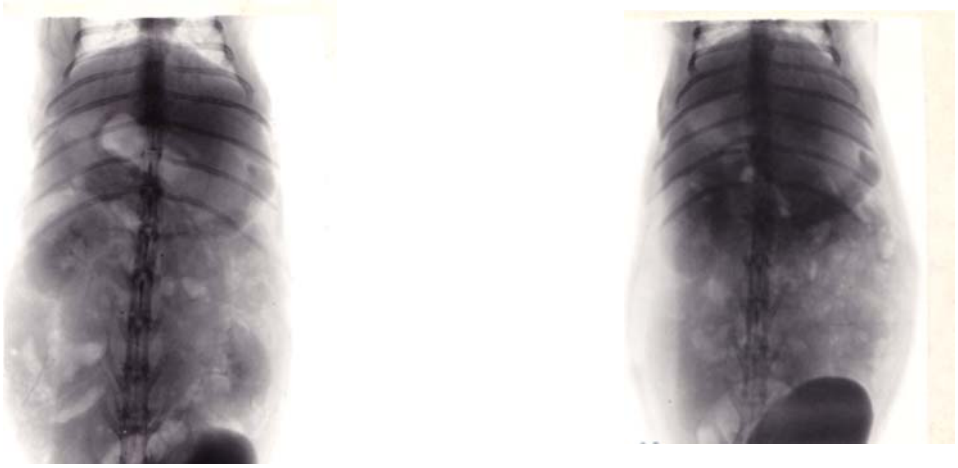

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Figure. Radiographs rabbit performed biligrafin after intravenous administration (5.0 mg / kg); after 1 hour (s) indicated a satisfactory opacification of the spleen and gall bladder, good - the kidneys and urinary system; 3-6 hours (b, c) come good opacification of the liver with lobed structure; excellent - the gall bladder and spleen; 24 hours (d) Keep up the good opacification of the spleen and gall bladder.

Maximum intensity of the peak detected by staining liver 2-6 hours, and then gradually decreased concentration of the drug. In subsequent periods can be identified traces of PKC in the intestine. With the extension of the term of the experience of the content of the drug in the intestine gradually increased.

X-ray examinations of the liver and spleen in dogs. Intravenous biligrafina 44 dogs at doses 1.0-7.0 ml / kg showed no staining at 2 at a dose of 1.0 ml / kg, satisfactory image radiopaque spleen noted in 6 animals at a dose of 1.5 ml / kg, and good radiopacity of the body - with all the other high peak doses. Thus, the spleen is visible on images, rabbits - 2.0 ml / kg, in dogs - 1.5 ml / kg.

Starting staining of spleen 33 44 dogs are registered in 20-30 minutes, and good - 1-1.5 hours after injection biligrafina. Peak maximum contrast of the spleen with the highest density was observed after 2-3 hours and lasts an average of 12-24 hours. In these terms the spleen is well visualized, had sharp edges and homogeneous structure. The shape of the spleen was different. Some dogs in the corner of the spleen artificially created high-density portion of the expense projection layers parenchyma due to body rotation.

Opacification of the spleen in dogs is different duration and high density images in the pictures. Apparently, this is due to a massive seizure of a large number of momentary biligrafina macrophages both in body and in the general circulation. All this resulted in prolonged drug deposition in the spleen and created long radiopacity body.

In contrast to the rabbit liver opacification in dogs were detected later on average after 4-6 hours. Such a phenomenon may occur due to a long accumulation and deposition of the drug concentration in the liver parenchyma. Therefore, to create a high density, providing a radiopaque image of the liver, require a certain time. The liver of the dog - a massive body composed of four lobes. Often the first and the anterior lobe, projection stratifying each other under normal conditions can create quite a dense shadow....

Radiopaque liver detected in dogs from the dose of 3.0 ml / kg in 5 of 10; at a dose of 4.0 ml / kg and above, 17 of 23 animals. Against the background of a homogeneous X-ray image picture differentiation of individual structural elements of the liver parenchyma was difficult

[6-8]. Perhaps this is due to the fact that biligrafin binds tightly to liver cells.

Findings

The study of contrasting abilities and x- ray specific properties biligrafina in two species of animals by intravenous administration of different doses of the drug showed the following. Minimum dose counterstain biligrafina 1.5 ml / kg, the maximum - 7.0 ml / kg and an optimal

diagnostic - 3.0 ml / kg. High doses biligrafina not improve the information content of radiographs, and only prolongs the contrast of up to several days....

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РЕНТГЕНОЛОГИЧЕСКИЕ ИССЛЕДОВАНИЯ ПЕЧЕНИ И СЕЛЕЗЕНКИ С ПРИМЕНЕНИЕМ РЕНТГЕНОКОНТРАСТНОГО СРЕДСТВА БИЛИГРАФИН У КРОЛИКОВ И СОБАК

Резюме Изучение контрастирующей способности и рентгенспецифических свойств билиграфина у двух видов животных при внутривенном введении различных доз препарата показало следующее. Минимальная контрастирующая доза билиграфина составляет 1,5 мл/кг, максимальная – 7,0 мл/кг, а оптимальная диагностическая – 3,0 мл/кг. Высокие дозы билиграфина не улучшают информативность рентгенограмм, а только удлиняют сроки контрастирования органов до нескольких суток.

Ключевые слова: рентгенгенорафия, печень, гепатит, рентгенконтрастые вещества, билиграфин, билирубин, рентгенограмма, кролик, собака, селезенка.

Ахметова М.С., Казиев Ж.І.

ҚОЯН МЕН ИТТІҢ БАУЫРЫ МЕН КӨК БАУЫРЫН РЕНТГЕНКОНТРАСТЫ ЗАТ БИЛИГРАФИНДІ ҚОЛДАНУ АРҚЫЛЫ ЗЕРТТЕУ

Түйіндеме Жануарлардың екі түріне вена арқылы түрлі мөлшерде енгізілген билиграфиннің контрастануы және рентгендік қасиеттерін зерттеу барысы төмендегідей қорытынды берді: билиграфиннің ең төменгі контрастану мөлшері 1,5 мл/кг, ең жоғарғысы – 7,0 мл/кг, ал қолайлы диагностикалық мөлшері - 3,0 мл/кг құрады. Билиграфиннің жоғарғы мөлшері рентгенограмманың ақпараттылығын жақсартпайды, ол тек мүшенің контрастануын бірнеше тәулікке ұзартады.

*Кілт сөздер:*рентгенография,бауыр, гепатит, рентгенконтрасты зат, билиграфин, билирубин, рентгенограмма, қоян, ит, көкбауыр.