



MODERN PROBLEMS IN EDUCATION AND THEIR SCIENTIFIC  
SOLUTIONS

ULTRASOUND EXAMINATION OF THE KIDNEYS

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Kidney – (ren, Greek: nephros) urine separate issuer pair member. It is bean-shaped. to form has is big in person Length 10-12 cm, width 5-6 cm , thickness 4 cm. Weight 120 - 200 g. It is dark red colored , surface big in person smooth . Kidney previous surface ( facies anterior) convex , posterior The surface ( facies posterior) is flatter . Its high tip (extremitas superior), lower tip ( extremitas inferior), convex lateral edge ( margo lateralis ), concave medial edge ( margo medialis ) difference The medial edge of the in the middle previous and back surfaces with limited depression , kidney gate ( hilus) renalis ) is located . From here kidney inside artery and nerves enters , from it and urine road , vein and lymph veins comes out . Kidney gate inside drowned entered kidney passing into the renal sinus (sinus renalis ) The kidney is in the lumbar region . spine of the step on both sides belly of the cavity back on the wall belly curtain behind located in the kidneys high ends to each other close if placed , bottom ends farther The left kidney to the right relatively higher The left kidney high tip XI chest spine middle , bottom tip of the III lumbar vertebra above edge in the field stands . Right kidney high tip XI chest spine bottom edge in the field , bottom tip and the third lumbar vertebra his body middle in the field stands

Kidney ultrasound inspection kidneys size, shape and location determination for used the images releasing invasive not been diagnostic Ultrasound using in the kidneys blood determine the flow possible.

Ultrasound ultrasound waves very high at frequency sending from the transducer Ultrasonic transducer on the skin is installed and ultrasound waves from the body passing by inside organs and to structures passes . Voice waves from the organs reflection echo such as jumping comes out and to the transducer returns. Transducer reflection delivered the waves again works , then they computer by under investigation organs or of tissues to the image turns.

Voice waves determined tissue type looking at every kind at speed spreads - the most fast bone through and the most slowly air via. Transducer sound of waves to the transducer return speed and returned sound wave size changes .

Ultrasound gel transducer and on the skin placed is a transducer skin on smooth moves and the sound better transmission for skin and transducer between the air no does.

Ultrasound again one type - doppler ultrasound, sometimes duplex This is called scanning, chest in the cage blood of the flow speed and direction determination for is used . Simple from ultrasound different as, Doppler examination during sound waves sound harvest does.





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Pregnancy during or contrasting to paint allergy if so, ultrasound safe use possible, because it is luminous or contrasting from paints does not use.

Kidneys assessment for execution possible was other to procedures X-ray, computer tomography (CT), kidney scans, antegrade pyelogram, intravenous pyelogram, and kidney angiogram enters .

Body feed substances food - from food takes and them to energy rotates. Body necessary the food acceptance after doing, waste in the intestine and in the blood remains.

Kidneys and urine release in the system potassium and sodium such as chemical substances, as well as in equilibrium water there is and from blood called urea waste type take throws . Urea protein- rich foods, such as meat, poultry meat and some vegetables in the body when broken working is released. Urea blood to the flow to the kidneys is held .

Rib from below back in the middle until two bud , one pair purple-brown organs located . Their task as follows :

- Urine in the form of from blood liquid waste take throw away
- In the blood salts and other of substances stable balance save
- Red blood cells to the formation help giving hormone erythropoietin working take out
- Blood pressure order to plant

Kidneys urea in the blood called nephrons small filtering devices through take throws. Every one The nephron is called the glomerulus. Small blood capillaries and kidney called a tube small from the tube harvest was from the ball consists of.

Urea, water and other waste with together, from nephrons passing, kidney tubules along urine harvest does.

Kidneys ultrasound reasons What is it ?

Kidneys ultrasound inspection using kidneys size, location, shape and urine bubble and urine bubble such as relevant structures determination possible. Ultrasound using cysts, tumors, abscesses, obstructions, fluid accumulation and in the kidney or his/her around infections to be determined possible. Kidneys and urine of the roads ultrasound of calcifications (stones) using determination possible.

Kidney ultrasound inspection kidney biopsy ( tissue) sample to get ), from the cyst or from an abscess liquid take to throw or drainage tube to place help giving needles to place help This procedure kidney artery and veins through in the kidneys blood flow measurement is also used for .

Kidney from transplantation then kidney ultrasound inspection transfer possible.

Kidney ultrasound inspection other to the signs based on, doctor by to be determined possible.

An ultrasound, the specialist assesses the size, shape, location, mobility of the organs, determines the anomalies of the structure of the tissues, the presence of volumetric





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formations. The following notes for preparing for an ultrasound of the kidneys and bladder will help to obtain reliable diagnostic results.

Ultrasound how passes :

Patient on the sofa lies . Specialist research the area special gel with works . The sensor body one to the part relocation via ultrasound doctor on the screen under investigation organ picture takes.Process completely painless , just filled in the urine sensor pressure with light discomfort to be possible . Diagnostics time average 15-30 minutes .

Big aged kidney and urine Preparation for ultrasound of the bladder:

If the kidneys ultrasound inspection if planned, adults to study preparation process 2 days ago begins. During this period light meals consumption to do and of gases to the formation take coming food completely no to do need. From now on except, Mezim, Creon, Pancreatin and analogues such as digestion to do improve for medicines acceptance you do possible .

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