

The invention relates to the medicine, in particularly to the techniques of X-ray examination of the biological structures. According to the invention, the electric parameters of X-ray apparatus are fixed prior to recording X-ray image. Upon X-ray exposure, the video signal is obtained and recorded as the digital data file. In the first X-ray picture the area corresponding to the minimal size of the defect being revealed is separated. The separated area is further analyzed and, upon the analysis, the adjusted parameters of X-ray apparatus are set. Then the second picture is made upon increasing the exposure time and decreasing the sensitivity of the position-prone detector. Such a picture is a main diagnostic one. The method allows us to decrease the dose load for the patients and to extend the functional possibilities of X-ray examination.