PREDSTAVITEV PRIMERA: RADIOLOŠKA OBRAVNAVA PACIENTA S SKOLIOZO V ORTOPEDSKI BOLNIŠNICI VALDOLTRA

CASE REPORT: IMAGING OF SCOLIOSIS PATIENT AT THE VALDOLTRA ORTHOPAEDIC HOSPITAL

Jan Grah, Katarina Jazbec, Vanda Mohorčič, Elen Pongrac

Ortopedska bolnišnica Valdoltra, Jadranska cesta 31, 6280 Ankaran – Ancarano /
Orthopaedic Hospital Valdoltra, Jadranska cesta 31, 6280 Ankaran – Ancarano

Korespondenca / Corresponding author: mohorcic.vanda@gmail.com

Prejeto/Recived: 15. 1. 2024
Sprejeto/Accepted: 5. 2. 2024

IZVLEČEK

Uvod in namen: Namen prispevka je predstavitev radiološke obravnave pacienta s skoliozo od prvega ortopedskega pregleda do zaključka zdravljenja.
Metode: Pri delu smo uporabili deskriptivno metodo, podprto s primeri slik iz kliničnega okolja. Literaturo smo iskali v podatkovnih bazah, ki so bile dostopne na spletu z uporabo ključnih besed: skolioza, radiološka obravnava pacienta s skoliozo, *scoliosis imaging, scoliosis screening, scoliosis surgery*. V sodelovanju z zdravniki ortopedi, zaposlenimi v Ortopedski bolnišnici Valdoltra, smo dopolnili področja o kliničnih indikacijah za posamezne metode slikanja, pričakovanih rezultatih slikanja ter poteku obravnave skoliotičnega pacienta.
Rezultati: Radiološka obravnava spremlja paciente s sumom na skoliozo od prvega obiska pri zdravniku ortopedu v okviru priprave na operativno zdravljenje, perioperativno rentgensko slikanje ter rentgensko spremljanje pacienta po operativnem posegu. Predoperativno slikanje zajema: izvedbo klasičnega rentgenskega slikanja (osnovne in funkcionalne posnetke), magnetnoresonančnega slikanja (MR) celotne hrbtenice, nizkodozno računalniško tomografsko (CT) slikanje za pripravo operativnih pripomočkov (vodeno vstavljanje transpedikularnih vijakov). Med operacijo izvajamo diaskopsko spremljanje vstavljanja vijakov, po potrebi tudi 3D posnetke s pomočjo C-loka. Po operativnem posegu opravljamo kontrolna klasična rentgenska slikanja celotne hrbtenice.
Razprava in zaključek: Celostna obravnava in sodelovanje med radiološkim oddelkom in zdravniki ortopedi nam omogoča najugodnejše zdravljenje za pacienta pri zdravljenju skolioze. Vloga radiološkega inženirja je zelo pomembna tako pri izvedbi celotne slikovne diagnostike kot tudi med operativnim posegom in po samem posegu.
Ključne besede: skolioza, radiološka obravnava pacienta s skoliozo, rtg slikanje skolioze, CT slikanje skolioze, MR slikanje skolioze pred operativnih posegom

ABSTRACT

Introduction: The purpose of this paper is to present the routine screening for the diagnosis and evaluation of scoliosis, from the first orthopaedic examination to the end of patient treatment.
Methods: The descriptive method was used for the writing of this paper, while examples of images from clinical practice were included. Literature was sourced in databases available online using the following keywords: scoliosis, scoliosis imaging, scoliosis screening and scoliosis surgery. In collaboration with orthopaedic surgeons working at the Valdoltra Orthopaedic Hospital, we completed the sections on the clinical indications for each imaging modality, the expected imaging results and the management of the scoliotic patient.
Results: Radiological treatment follows patients with suspected scoliosis from the first visit to an orthopaedist , as part of preparation for surgery, perioperative X-ray imaging and X-ray imaging of the patient after surgery. Preoperative imaging includes the performance of traditional X-ray imaging (basic and specialized projections), magnetic resonance imaging (MRI) of the entire spine and low-dose computed tomography (CT) imaging for the preparation of operative devices (guided insertion of transpedicular screws). During the operation, we perform the diascopic monitoring of screw insertion, and if necessary, 3D images with the help of a C-arm. After the surgery, we perform postoperative X-ray imaging of the entire spine.
Discussion and conclusions: Comprehensive treatment and cooperation between the radiology department and orthopaedic doctors enables us to provide the most favourable treatment for the patient in the treatment of scoliosis. The role of the radiologic technologist is very important, both in the execution of the entire diagnostic imaging and during and after the surgery.
Keywords: scoliosis imaging, scoliosis screening, scoliosis surgery, X-ray guided transpedicular fixation

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