

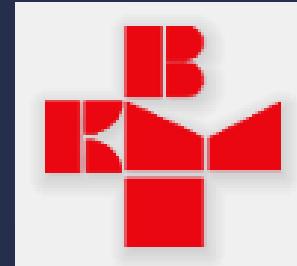


**Kinematico oslikavanje vratne kralježnice
magnetskom rezonancom
MR FSVK**

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Predstavljanje metode slikovnog oslikavanja na uređaju za magnetsku rezonancu, te njena primjena kroz znanstveno istraživački rad sa područja neurokirurgije.

UREĐAJ

- Toshiba Vantage Atlas MRI System
- FOV od $55 \times 55 \times 50$ cm, nudi najveću homogenost polja MRI sustava unutar ultra kratkog bora sa promjerom 65 cm.
- opremljen s pianissimo tehnologijom kako bi se smanjio i do 90% akustične buke
- pruža osvjetljenje i ventilaciju u cijelom otvoru
- Time-SLIP
- Fresh Blood Imaging



ZAVOJNICE I DODATCI



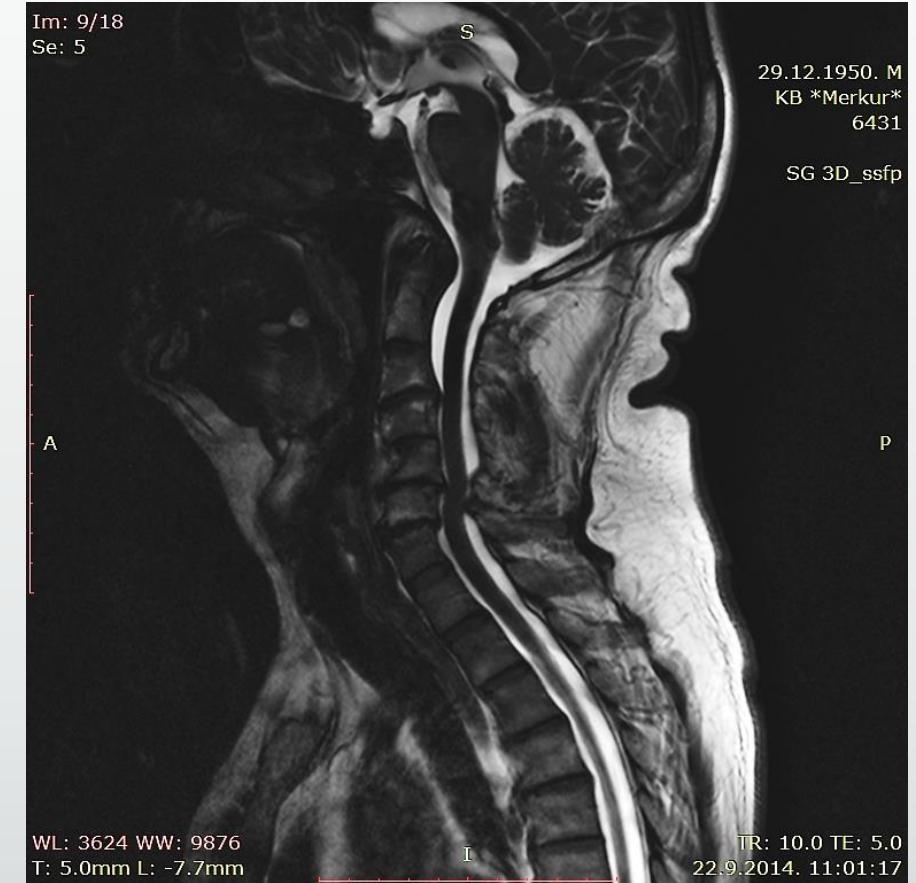
POLOŽAJ PACIJENTA



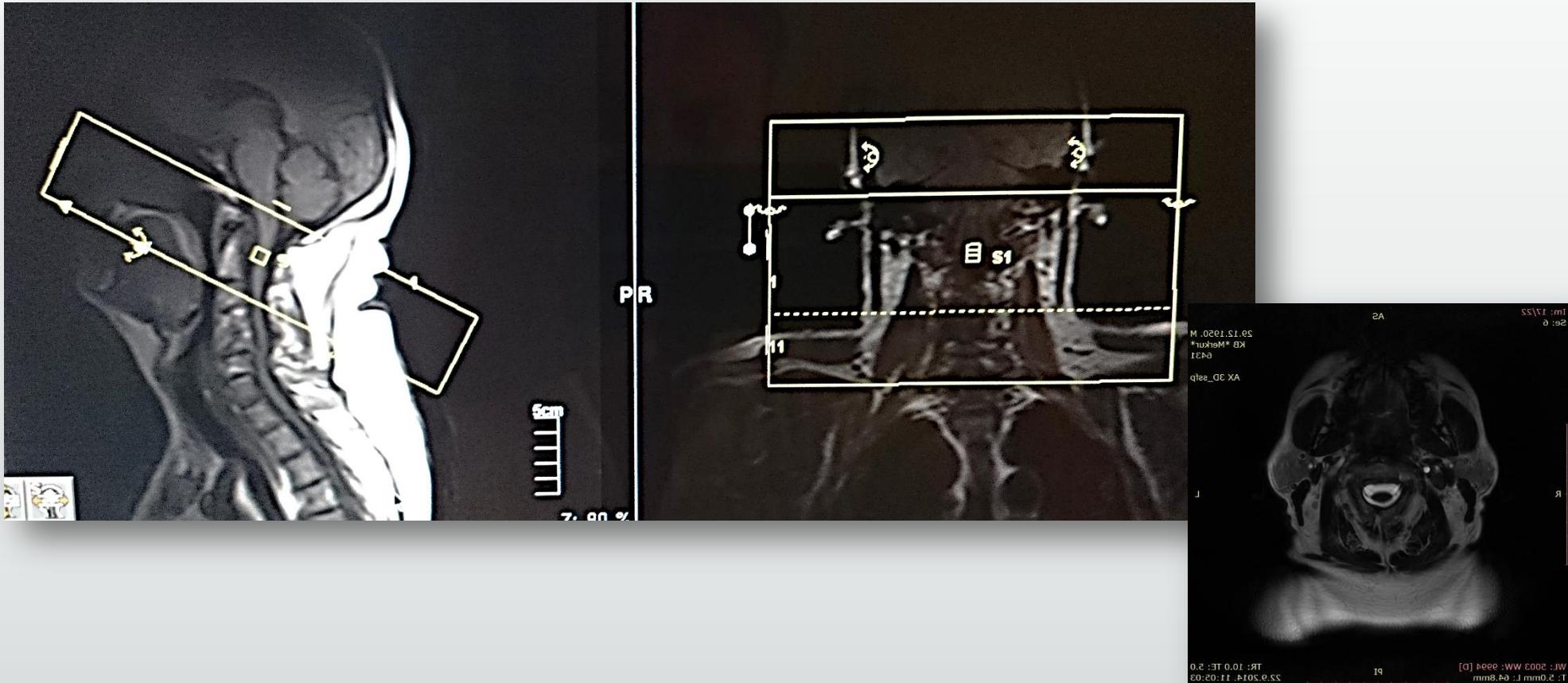
PROTOKOL

Scan ID	Time	Mode	Plane	In.Tech	TR	TE	NS	FOV	MTX
C SPINE COR locator	00:21	-----	CO:RL	FSE(8) 2D	1112	15	8	40.0	128 x 256
Locator SAG	00:15	-----	SGo:AP	SE 2D	111	10	3	38.0	128 x 256
Map	00:13	-----	AX:RL	FE 2D	185	4	23	30.0	64
Shimming	00:07	-----	AX:AP	FE 2D	200	4.8/9.	15	25.6	32
SG 3D_ssfp	01:25	-----	SGo:AP	FE 3D	10	5	9	29.5	384
AX 3D_ssfp	01:40	-----	AXo:AP	FE 3D	10	5	11	22.5	384
-PUT PATIENT IN EXTE	01:40	-----	AXo:AP	FE 3D	10	5	11	22.5	384
C SPINE COR locator	00:21	-----	Oth:Oth	FSE(8) 2D	1112	15	6	40.0	128 x 256
Map	00:13	-----	AX:RL	FE 2D	185	4	23	30.0	64
Shimming	00:07	-----	AX:AP	FE 2D	200	4.8/9.	15	25.6	32
SG 3D_ssfp EXT	01:25	-----	SGo:AP	FE 3D	10	5	9	29.5	384
AX 3D_ssfp	01:40	-----	AXo:AP	FE 3D	10	5	11	22.5	384
-PUT PATIENT IN FLEX	01:40	-----	AXo:AP	FE 3D	10	5	11	22.5	384
C SPINE COR locator	00:21	-----	Oth:Oth	FSE(8) 2D	1112	15	6	40.0	128 x 256
Map	00:13	-----	AX:RL	FE 2D	185	4	23	30.0	64
Shimming	00:07	-----	AX:AP	FE 2D	200	4.8/9.	15	25.6	32
SG 3D_ssfpFLEX	01:25	-----	SGo:AP	FE 3D	10	5	9	29.5	384
AX 3D_ssfp	01:40	-----	AXo:AP	FE 3D	10	5	11	22.5	384
AX 3D_ssfp	02:34	-----	AX:RL	FE 3D	10	5	18	18.0	384

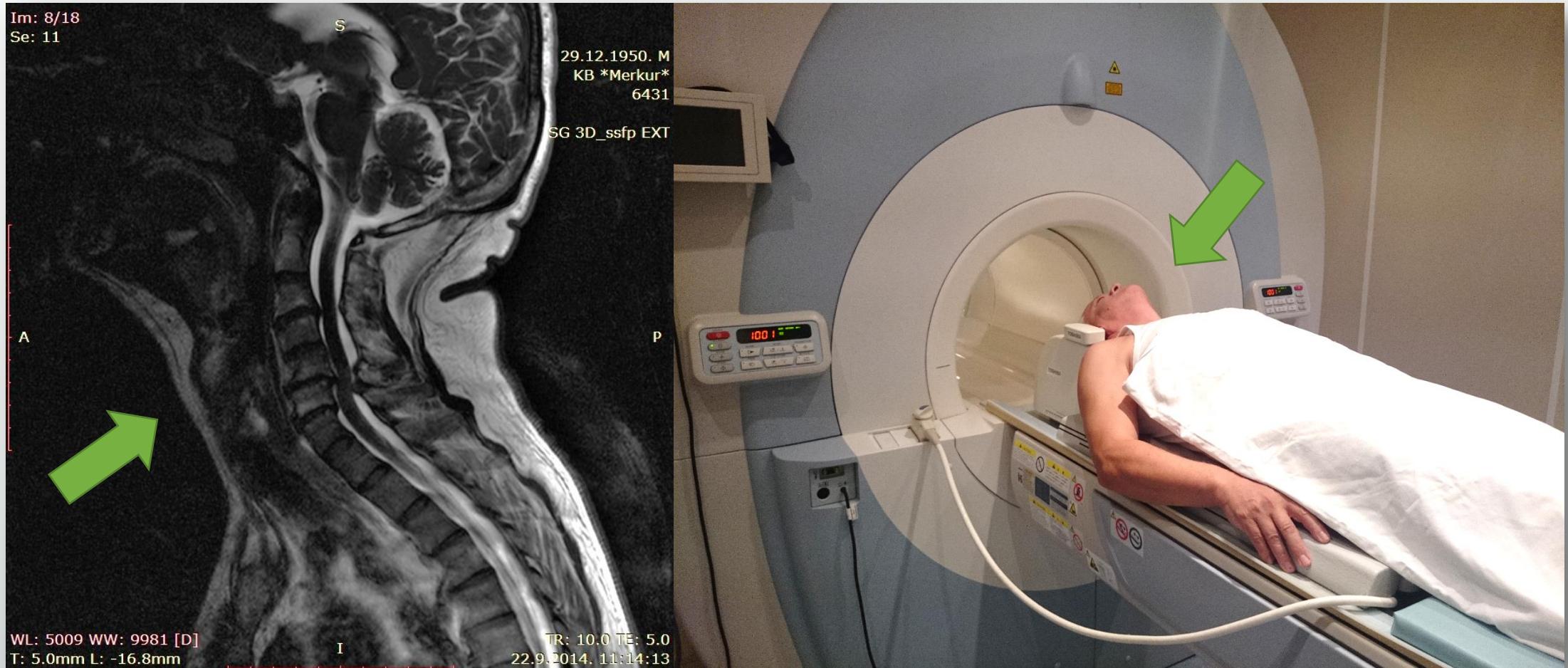
NATIVNO C KRALJEŽNICA



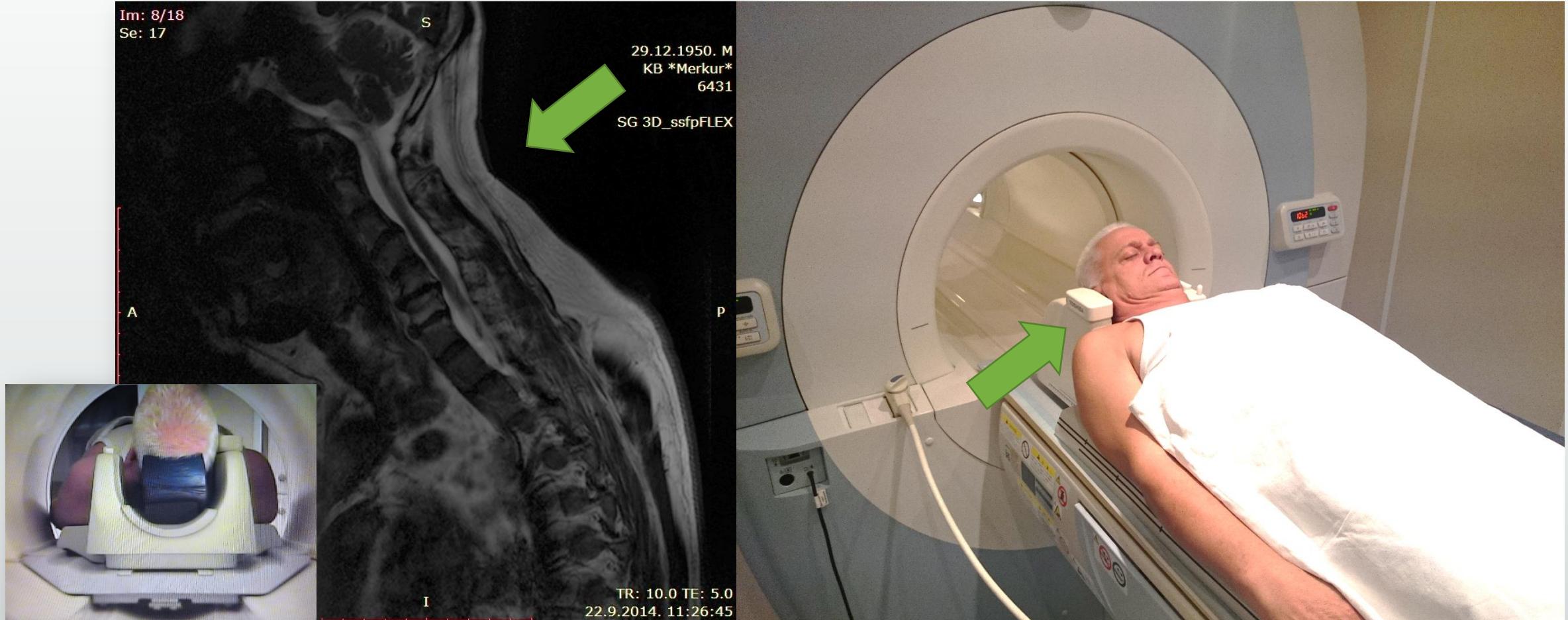
NATIVNO Ć KRALJEŽNICA



EKSTENZIJA C KRALJEŽNICE



FLEKSIJA Č KRALJEŽNICE



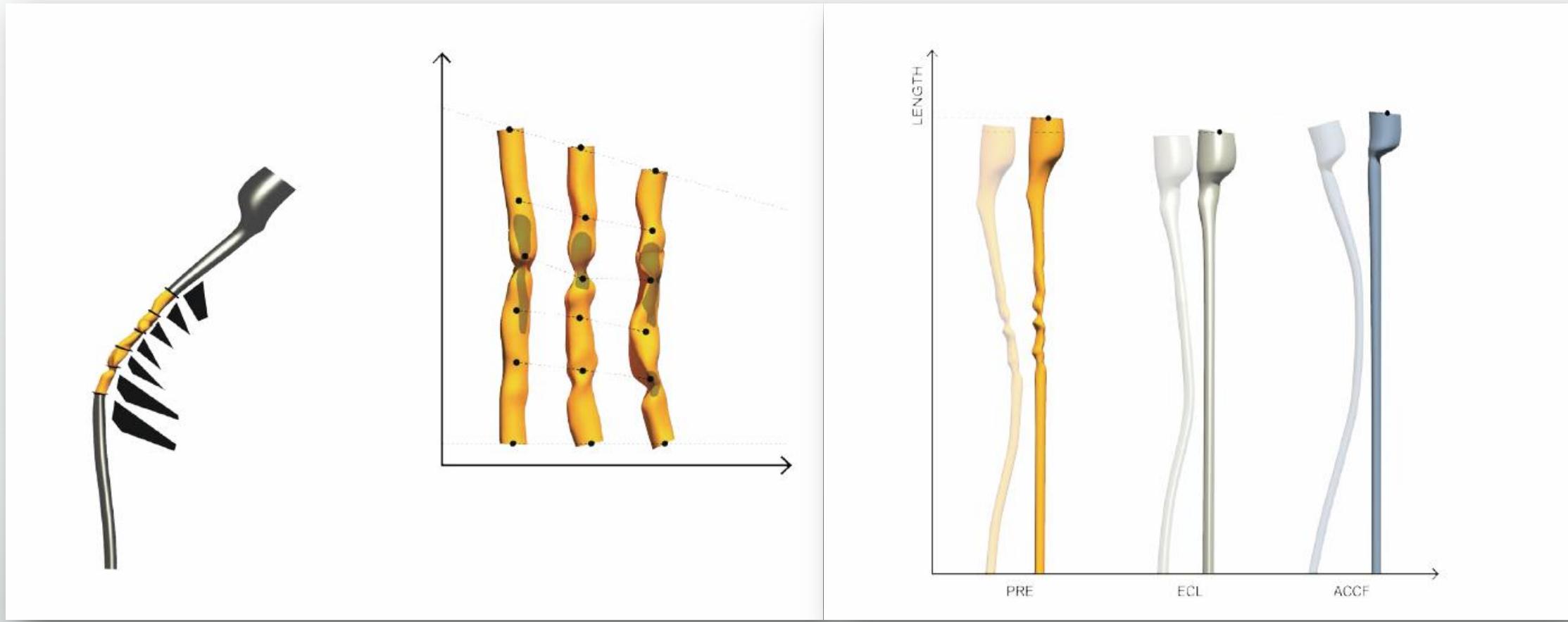
KOMPARACIJA SLIKOVNIH TEHNIKA

Techniques	TOSHIBA	PHILIPS	GE	SIEMENS	MARCONI
Gradient Echo Steady State Free Precession	FE	FFE	GRASSE, GRE	FISP, GRE	FAST-II
	T1-FE	CE-FFE T1	SPGR	FLASH	T1-FAST
		CE-FFE T2	SSFP	PSIF	CE-FAST
	TrueSSFP	Balanced FFE (BFFE)	FIESTA	True FISP	CBASS
Fast Scan Techniques Fast Field Echo (Gradient Echo sequence)	FFE	TFE	Rapid SPGR	TurboFlash	
		TFE	FGRE	MP RAGE	
	3D-FFE	3D-TFE			
		Keyhole			
	HEPI	GRASE		TGSE	
	EPI	EPI	EPI	EPI	EPI
	FSE	TSE	FSE	TSE	FAME

METODA MR FSVK KROZ ZNANSTVENU STUDIJU

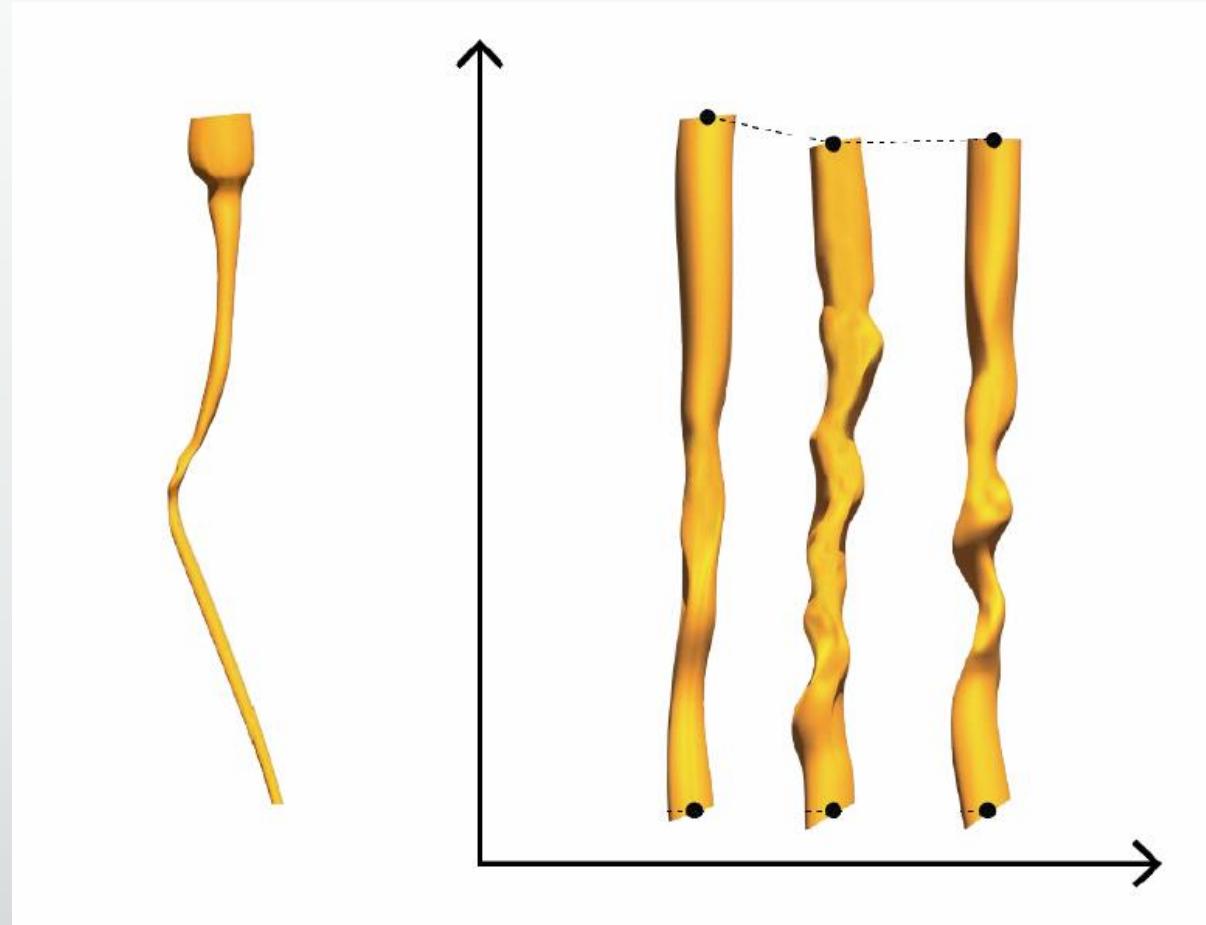


METODA MR FSVK KROZ ZNANSTVENU STUDIJU



METODA MR FSVK KROZ ZNANSTVENU STUDIJU

ZAKLJUČAK





MORE EVIDENCE OF A HEALTH CARE SYSTEM IN CRISIS

Zahvalujem na pažnji...

