CurveBeam AI

Enhanced HiRise Effective Doses(1)

	Lite Protocol mSv	Std Protocol mSv	Lrg Protocol mSv
HIP	**1.9**	**3.1**	**2.5**
kV	120	120	120
mA	20	20	20
Exposure Time (Sec)	9.36	14.4	25.2
PELVIS	**Not Calculated**	**4.3**	**4.5**
kV	120	120	120
mA	20	20	20
Exposure Time (Sec)	9.36	14.4	25.2
KNEE*	**0.0117**	**0.0178**	**0.0214**
kV	100	120	120
mA	12	14	18
Exposure Time (Sec)	10.8	10.8	10.8

	Lite Protocol mSv	Std Protocol mSv	Lrg Protocol mSv
HAND/WRIST	**0.0024**	**0.0056**	**0.0086**
kV	100	120	120
mA	12	12	12
Exposure Time (Sec)	5.76	5.76	6.24
FOOT/ANKLE (LFOV)*	**0.0108**	**0.0181**	**0.0293**
kV	100	120	120
mA	12	12	20
Exposure Time (Sec)	8.64	8.64	9.36
FOOT/ANKLE (MFOV)*	**0.0132**	**0.0215**	**0.0424**
kV	100	120	120
mA	12	12	20
Exposure Time (Sec)	8.64	8.64	9.36

	Lite Protocol mSv	Std Protocol mSv	Lrg Protocol mSv
PEDIATRIC KNEE*			
5 Years Old	**0.0361**	**0.0262**	**0.0139**
10 Years Old	**0.0262**	**0.0430**	**0.0217**
15 Years Old	**0.0721**	**0.0511**	**0.0260**
PEDIATRIC HAND/WRIST			
5 Years Old	**0.0075**	**0.0193**	**0.0307**
10 Years Old	**0.0043**	**0.0108**	**0.0169**
15 Years Old	**0.0024**	**0.0057**	**0.0086**
PEDIATRIC FOOT/ANKLE (LFOV)*			
5 Years Old	**0.0314**	**0.0632**	**0.1030**
10 Years Old	**0.0163**	**0.0294**	**0.0478**
15 Years Old	**0.0104**	**0.0174**	**0.0282**
PEDIATRIC FOOT/ANKLE (MFOV)*			
5 Years Old	0.0394	0.0751	0.1460
10 Years Old	0.0200	0.0346	0.0681
15 Years Old	0.0127	0.0206	0.0407

kV, mA, and Exposure Times are the same as those for adult protocols.

VARIOUS DIAGNOSTIC RADIOLOGY PROCEDURES, INCLUDING FLOUROSCOPY (2)

	mSv
EXTREMITY	<0.001
HIP	0.7
PELVIS	0.6

MEDICAL CT

	mSv
UNILATERAL FOOT & ANKLE	0.07 (3)
STANDARD HIP	3.5 (1)
LOW DOSE HIP	0.97 (4)

Sources:

* Bilateral Exposure.

(1) Internal study overseen by Jaydev Dave, PhD, DABR, MS, FAAP. Abstract submitted for review.

(2) Mettler FA, et al: Effective Doses in Radiology and Diagnostic NuclearMedicine: A Catalog, Radiology 2008 248:254-263)

(3) Biswas D, Bible JE, Bohan M, Simpson AK, Whang PG, Grauer JN. Radiation exposure from musculoskeletal computerized tomographic scans. J Bone Joint Surg Am. 2009 Aug;91(8):1882-9. doi: 10.2106/JBJS.H.01199. PMID: 19651945.

(4) Arthroscopycopyjournal.org (2019, May 01). Low-Dose Computed Tomography... Retrieved Oct. 20, 2022, from https://www.arthroscopyjournal.org/article/S0749-8063(18)31067-3/fulltext