

## Erratum: The computed tomography based anatomy of the ossa cuneiformia

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*In the above article, the tables contained transcription errors. The corrected tables are included below. At once the abstract needed to be corrected. The corrected version is printed below.*

### Abstract

There is a lack of basic anatomic informations regarding the ossa cuneiformia. The aim of the present descriptive study was the detailed evaluation of the anatomy of the ossa cuneiformia. We analyzed 100 computer tomography scans of feet without deformities or previous trauma. The length, height and width of each cuneiforme and their articular surfaces were assessed. We itemized the data to gender differences and to foot length. The medial cuneiforme os had a length of  $23.8 \pm 2.4$  mm (mean  $\pm$  standard deviation), a width of  $15.9 \pm 2.7$  mm and a height of  $26.9 \pm 3.6$  mm. The respective values for the intermediate cuneiforme were  $17.7 \pm 1.9$  mm,  $12.4 \pm 3.1$  mm and  $20.8 \pm 2.9$  mm and for the lateral cuneiforme  $24.3 \pm 2.9$  mm,  $14.9 \pm 2.9$  mm and  $17.3 \pm 4.3$  mm. We found statistical relevant differences regarding gender and foot length subgroups whereas not for all parameters. The present study illustrates basic anatomic data

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regarding the ossa cuneiformia. This information might be helpful for implant design and placement during midfoot surgery.

**Table 1. Anatomy of the ossa cuneiformia including their articular surfaces of gender subgroups.**

		All (n=100)	Male (n=72)	Female (n=28)	P-value
Medial cuneiform	Length	$23.8 \pm 2.4$	$24.3 \pm 2.3$	$22.3 \pm 2.2$	<0.0001*
	Width	$15.9 \pm 2.7$	$16.4 \pm 2.8$	$14.8 \pm 2.2$	0.0002*
	Height	$26.9 \pm 3.6$	$27.6 \pm 3.5$	$24.9 \pm 3.1$	<0.0001*
	Proximal articular surface width	$16.0 \pm 3.0$	$16.4 \pm 3.0$	$14.7 \pm 2.7$	0.0006*
	Proximal articular surface height	$16.7 \pm 3.2$	$17.3 \pm 3.1$	$14.8 \pm 2.5$	<0.0001*
	Distal articular surface width	$19.0 \pm 5.9$	$19.0 \pm 6.1$	$18.7 \pm 5.5$	0.7498
	Distal articular surface height	$22.6 \pm 6.4$	$23.4 \pm 6.4$	$20.3 \pm 6.1$	0.0028*
	Intercuneiform I/II articular surface length	$19.3 \pm 3.6$	$19.5 \pm 3.7$	$19.0 \pm 3.3$	0.3908
	Intercuneiform I/II articular surface height	$17.5 \pm 5.1$	$17.7 \pm 5.2$	$17.0 \pm 4.7$	0.3969
Intermedium cuneiform	Length	$17.7 \pm 1.9$	$18.1 \pm 1.8$	$16.8 \pm 1.8$	<0.0001*
	Width	$12.4 \pm 3.1$	$12.8 \pm 3.0$	$11.5 \pm 3.2$	0.0127*
	Height	$20.8 \pm 2.9$	$21.2 \pm 2.8$	$19.8 \pm 3.0$	0.0028*
	Proximal articular surface width	$12.9 \pm 4.5$	$13.4 \pm 4.4$	$11.3 \pm 4.5$	0.0044*
	Proximal articular surface height	$14.0 \pm 5.2$	$14.4 \pm 5.5$	$13.1 \pm 4.1$	0.1462
	Distal articular surface width	$13.7 \pm 4.0$	$13.8 \pm 3.9$	$13.2 \pm 4.2$	0.3613
	Distal articular surface height	$15.9 \pm 4.2$	$16.1 \pm 4.3$	$15.1 \pm 4.0$	0.1401
	Intercuneiform II/III articular surface length	$16.9 \pm 4.1$	$17.2 \pm 4.3$	$16.0 \pm 3.7$	0.0817
	Intercuneiform II/III articular surface height	$16.3 \pm 4.3$	$16.6 \pm 4.4$	$15.4 \pm 3.8$	0.0864
Lateral cuneiform	Length	$24.3 \pm 2.9$	$24.7 \pm 2.9$	$23.1 \pm 2.3$	0.0004*
	Width	$14.9 \pm 2.9$	$15.1 \pm 3.1$	$14.3 \pm 2.3$	0.0632
	Height	$17.3 \pm 4.3$	$17.9 \pm 4.3$	$15.9 \pm 3.9$	0.0032*
	Proximal articular surface width	$11.4 \pm 2.5$	$11.7 \pm 2.6$	$10.6 \pm 1.8$	0.0074*
	Proximal articular surface height	$12.2 \pm 2.9$	$13.0 \pm 2.7$	$10.1 \pm 2.3$	<0.0001*
	Distal articular surface width	$12.9 \pm 3.0$	$13.2 \pm 3.2$	$12.1 \pm 2.1$	0.0228*
	Distal articular surface height	$12.5 \pm 2.5$	$12.8 \pm 2.5$	$11.9 \pm 2.3$	0.0387*
	Cuneiformcuboidal articular surface length	$16.0 \pm 3.3$	$16.3 \pm 3.5$	$15.3 \pm 2.9$	0.0674
	Cuneiformcuboidal articular surface height	$15.6 \pm 3.4$	$16.2 \pm 3.3$	$14.0 \pm 3.2$	<0.0001*

The results of the evaluation of basic anatomic parameters of the cuneiforms and their articular surfaces are illustrated. Additionally, we itemized this information for female and male patients. Results are illustrated as mean  $\pm$  SD. Statistically relevant differences are marked with asterisks\*.

**Table 2. Anatomy of the ossa cuneiformia including their articular surfaces of foot length subgroups.**

		All (n=100)	Small (n=34)	Medium (n=33)	Large (n=33)	P-value S vs. M	P-value S vs. L	P-value M vs. L
Medial cuneiform	Length	23.8 ± 2.4	22.9 ± 2.3	23.7 ± 2.5	24.9 ± 2.1	0.0584	<0.0001*	0.0051*
	Width	15.9 ± 2.7	15.3 ± 2.7	15.5 ± 2.1	16.9 ± 3.0	0.6448	0.0021*	0.0032*
	Height	26.9 ± 3.6	26.2 ± 3.3	25.9 ± 3.4	28.6 ± 3.6	0.5417	0.0001*	<0.0001*
	Proximal articular surface width	16.0 ± 3.0	15.1 ± 3.0	16.0 ± 2.8	16.7 ± 3.1	0.0750	0.0049*	0.2320
	Proximal articular surface height	16.7 ± 3.2	16.3 ± 3.1	16.1 ± 2.6	17.7 ± 3.6	0.8124	0.0200*	0.0078
	Distal articular surface width	19.0 ± 5.9	17.3 ± 5.8	20.0 ± 5.6	19.7 ± 6.1	0.0092*	0.0256*	0.7707
	Distal articular surface height	22.6 ± 6.4	22.0 ± 6.5	21.1 ± 6.0	24.8 ± 6.3	0.4565	0.0151*	0.0012*
	Intercuneiform I/II articular surface length	19.3 ± 3.6	18.8 ± 3.4	18.8 ± 3.2	20.5 ± 3.9	0.9700	0.0154*	0.0141*
	Intercuneiform I/II articular surface height	17.5 ± 5.1	17.0 ± 5.0	17.0 ± 5.5	18.7 ± 4.6	0.9260	0.0433*	0.0757
Intermedium cuneiform	Length	17.7 ± 1.9	17.0 ± 1.9	17.8 ± 2.0	18.4 ± 1.6	0.0182*	<0.0001*	0.1088
	Width	12.4 ± 3.1	11.6 ± 2.6	12.6 ± 3.4	13.1 ± 2.9	0.0494*	0.0019*	0.3883
	Height	20.8 ± 2.9	20.5 ± 2.4	19.9 ± 2.7	22.0 ± 3.2	0.1797	0.0019*	<0.0001*
	Proximal articular surface width	12.9 ± 4.5	11.8 ± 4.5	13.1 ± 4.2	13.6 ± 4.7	0.0872	0.0259*	0.5331
	Proximal articular surface height	14.0 ± 5.2	14.4 ± 5.0	12.9 ± 4.9	14.9 ± 5.5	0.0919	0.5361	0.0298*
	Distal articular surface width	13.7 ± 4.0	13.5 ± 4.2	14.3 ± 3.8	13.3 ± 3.9	0.2766	0.8090	0.1656
	Distal articular surface height	15.9 ± 4.2	15.5 ± 4.0	15.4 ± 4.3	16.7 ± 4.3	0.9434	0.0978	0.0964
	Intercuneiform II/III articular surface length	16.9 ± 4.1	17.2 ± 4.4	15.8 ± 3.6	17.6 ± 4.2	0.0576	0.5843	0.0113*
	Intercuneiform II/III articular surface height	16.3 ± 4.3	15.6 ± 4.0	15.1 ± 4.4	18.3 ± 3.9	0.5229	0.0002*	<0.0001*
Lateral cuneiform	Length	24.3 ± 2.9	23.4 ± 2.1	24.0 ± 3.3	25.4 ± 2.7	0.2289	<0.0001*	0.0081*
	Width	14.9 ± 2.9	14.0 ± 2.9	15.5 ± 2.7	15.2 ± 2.9	0.0025*	0.0159*	0.5881
	Height	17.3 ± 4.3	16.8 ± 3.5	17.0 ± 4.8	18.1 ± 4.4	0.8335	0.0747	0.1775
	Proximal articular surface width	11.4 ± 2.5	10.9 ± 2.9	11.5 ± 2.1	11.8 ± 2.4	0.2392	0.0768	0.4451
	Proximal articular surface height	12.2 ± 2.9	11.5 ± 3.0	12.5 ± 3.3	12.7 ± 2.3	0.0834	0.0137*	0.6578
	Distal articular surface width	12.9 ± 3.0	12.1 ± 2.6	12.7 ± 2.8	13.9 ± 3.3	0.2185	0.0007*	0.0274*
	Distal articular surface height	12.5 ± 2.5	12.3 ± 2.4	11.9 ± 2.5	13.5 ± 2.4	0.3115	0.0052*	0.0002*
	Cuneiformcuboidal articular surface length	16.0 ± 3.3	16.1 ± 3.6	15.1 ± 2.7	16.9 ± 3.5	0.0748	0.2293	0.0017*
	Cuneiformcuboidal articular surface height	15.6 ± 3.4	14.8 ± 3.4	15.3 ± 3.2	16.7 ± 3.3	0.4510	0.0014*	0.0122*

We found statistically relevant differences especially for the comparisons of the subgroup with larger feet. Results are illustrated as mean ± SD. Statistically relevant differences are marked with asterisks\*.