Supplementary Table 11. Subgroup comparisons of morphometric measurements and computed tomography HU values for overall unilateral C2 laminae between the control and BI groups based on the diagnosis of C2–3 assimilation

Variable	Control group		BI group			p-value[†]		
	No. of unilateral laminas (A)	Non-C2/3 assimilation (A)	No. of unilateral laminas (B/C)	C2/3 assimilation (B)	non-C2/3 assimilation (C)	A vs. B	A vs. C	B vs. C
Laminar length (cm)	408	3.16±0.27	128/282	2.88±0.50	3.06±0.33	<0.001	<0.001	<0.001
Laminar thickness (mm)	408	5.81±1.18	128/282	5.32±1.30	5.37±1.24	<0.001	<0.001	0.719
Laminar angle (°)	408	49.51±3.04	128/282	50.70±5.81	48.59±4.61	0.024	0.006	<0.001
Laminar HU values	408	257.79±100.27	128/282	222.40±103.40	227.94±129.40	0.002	<0.001	1.000

Values are presented as mean ± standard deviation.

HU, Hounsfield unit; BI, basilar invagination.

[†]The p-value were obtained by analysis of variance test or Kruskal-Wallis test according to the result of the test for normal distribution. The nominal p-value was adjusted as 0.05 for the multiple comparisons.

Supplementary Table 12. Multiple linear regression on laminar length

Variable	B	SE	Standard β	t	p-value	VIF
(Intercept)	3.132	0.017	-	179.465	<0.001	-
Male sex	0.190	0.024	0.252	7.956	<0.001	1.010
HRVA	-0.109	0.024	-0.154	-4.563	<0.001	1.145
Goel A	-0.167	0.029	-0.216	-5.816	<0.001	1.398
C2/3 assimilation	-0.079	0.036	-0.082	-2.191	0.029	1.405

SE, standard error; VIF, variance inflation factor; HRVA, high-riding vertebral artery.