Supplementary Table S2. Shape changes for minimum (Min; scale factor: -0.1) and maximum (Max, scale factor: 0.1) values of the first two components (PC1 and PC2) for each vertebral region. a-p: anteroposterior; +: more; NP: neural process; TP: transverse process.

	PC1		PC2	
	Min	**Max**	**Min**	**Max**
Cv				
Center	Wider but lower faces	Slightly compressed a-p, taller but narrower faces	Anterior face slightly larger, posterior face notably larger	Slightly smaller faces
NP	Lower, greater caudal inclination	Taller, + robust	Slightly shorter and less inclined caudally	Slightly taller
TP	Longer, narrower	Shorter, + robust	+ robust, both in anterior and dorsal view	Narrower. Extremes placed + ventrally
Th				
Center	Anterior face + concave	More vertical orientation Larger faces (height and width)		
NP	Slightly taller	Shorter and slightly wider	Wider. More caudal inclination	Narrower
TP	Slightly shorter	Placed + dorsally on the NP. Extremes placed further from each other (due to wider centra).	Wider. Less anterior inclination, Extremes placed further from each other and of dorsal position.	Narrower and with less caudal orientation. Placed + dorsally on the NP. Extremes of + ventral position and closer to each other.
Zigapophysis	Well developed. Lower	Less developed. Higher	Well developed. Lower	Less developed. Higher
Thm				
Center	Longer centra. Smaller faces	Slightly compressed a-p. Larger faces		Smaller and + convex anterior face + concave posterior face
NP	Longer and wider	Shorter and narrower		Slightly longer
TP	Shorter. + inclined ventrally + robust in anterior view	Longer; + perpendicular (less inclined ventrally)	+ anterior orientation	+ inclined ventrally, extremes placed + ventrally
Zigapophysis	Well developed	Less developed	+ distant to each other	Less developed

Supplementary Tables S2. Continuation

	PC1		PC2	
	Min	**Max**	**Min**	**Max**
ThTa				
Center	Longer	Compressed a-p	Larger faces, especially the posterior one	Center shape changes in such way that the ventral area is more caudal than the dorsal area
NP	+ anterior inclination	Slightly shorter and narrower		Narrower and + inclined caudally
TP		Slightly longer, less inclined caudally. Extremes with slightly + dorsal position	Narrower in the proximal area	Wider in the middle, + anterior extremes. Anterior edge is + ventral than the posterior one.
Metapophysis	Well-developed. Higher	Lower, Less developed		Well-developed. Higher
TaTm				
Center	Longer	Notably + compressed a-p	Slightly longer a-p	Lower
NP	Slightly longer, and slight anterior inclination	Shorter and narrower	Slightly longer. Wider	
TP	Straight. Extremes + ventral	Narrower. Extremes + dorsal. Slightly curved anteriorly.	Ventral orientation. Extremes + ventral. Anterior inclination. Slightly concave anteriorly.	Slightly longer. Perpendicular orientation to sagittal axis. Extremes + caudal
Metapophysis	Less developed. Higher	Well developed	Well developed	
Tm				
Center	Larger faces	+ compressed. Vertical axis perpendicular to the longitudinal.		Slightly compressed a-p.
NP	+ Robust. Greater anterior inclination	Narrower, especially in the join arch-spine.	Wider. Less anterior inclination	Narrower. Marked anterior inclination
TP	Slightly anterior inclination	Narrower, longer and marked anterior inclination. Extremes placed higher	+ ventral extremes Perpendicular to the longitudinal axis	Marked anterior inclination
Metapophysis	Less developed	Less developed.	Less developed	Well developed

Supplementary Tables S2. Continuation

	PC1		PC2	
	Min	**Max**	**Min**	**Max**
TmTp				
Center	Notably larger faces, Longer a-p	Smaller facess. The vertical axis is inclined: dorsal area is more posterior with respect to the extreme of the NP	Larger faces	Slightly compressed a-p
NP	Longer and wider	Longer in relation to center height, but lower and with greater anterior inclination	Shorter and wider	Longer, narrower and + inclined ateriorly
TP	Shorter. Extremos + dorsales	Well developed, narrower and with greater anterior inclination	+ Inclined anteriorly	Anterior edge + ventral than the posterior. Less inclined anteriorly
Metapophysis	Well-developed	Well-developed and placed closer to the NP extreme	Less developed. Lower	Well-developed. Higher
TP				
Center	Large convex faces	Smaller and + compressed a-p; dorsal area of the center becomes + posterior with respect to the NP extreme	Longer a-p Insertion site for chevrons is relatively smaller	+ compressed a-p Insertion site for chevrons is relatively larger
NP	Shorter	Taller and well developed	Shorter	Longer
TP	Less conspicuous	Notably larger	Well-developed and inclined anteriorly	Shorter, extremes placed more posteriorly
Metapophysis	Poorly developed	Well-developed. Higher	Well-developed. Lower	Higher. Less distant from each other.
TS				
Center	Taller, longer and notably convex	Shorter, + compressed a-p.	Large convex faces + compressed a-p	Laterally + compressed, flatter faces
NP	Less conspicuous	Taller	Less conspicuous	Taller
Metapophysis	Less conspicuous	Well-developed. Higher	Less conspicuous	Well-developed. Higher