Congenital Butterfly Vertebra

Vértebra em Borboleta

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A 55 year-old woman presented with constipation and abdominal bloating. Physical examination revealed mild diffuse abdominal tenderness. Abdominal ultrasound and colonoscopy were unremarkable. Abdominal X-ray showed abnormal appearance of T12 and L3 vertebrae. Lateral and anteroposterior radiograph of lumbar spine x-ray showed an anterior wedging of L3 with widening of its vertebral bodies. The adjacent vertebral bodies of T12 and L3 adapt to the altered intervertebral discs on either side by showing concavities along the adjacent endplates, A and B.

Figure 1 - AP spine x-ray showing a sagittal cleft through center of T12 and L3 with funnel shaped ends. A: Lateral x-ray of the thoraco-lumbar region showed an anterior wedging of T12 and L3 with widening of its vertebral bodies. B: The adjacent vertebral bodies of T12 and L3 adapt to the altered intervertebral discs on either side by showing concavities along the adjacent endplates, A and B.

Figure 2 - A: CT scan of the thoraco-lumbar region showing T9-T12 and L3 butterfly vertebra; B: CT scan in coronal view revealing butterfly vertebrae at the level of T9-T12 and L3; C: CT 3D reconstruction confirming the presence of butterfly vertebra at L3.

Butterfly vertebra is a rare congenital malformation, which occurs usually at the thoracolumbar spine. It is due to a defect of fusion of two chondrification centers in an embryonic vertebral body due to a persistent notochordal tissue between them. Butterfly vertebra is commonly asymptomatic. Associations with supernumerary lumbar vertebrae or anterior spina bifida are possible.1 Butterfly vertebra can be mistaken with wedge vertebral fracture1,2 or, less likely, metastasis. Awareness of this condition assists in making rational use of extensive noninvasive and invasive diagnostic procedures.

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REFERENCES

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