

DEFINITION

1. Minor variations of the lumbar and sacral anatomy are common. These include;
 - 1.1 **sacralization** – partial or complete incorporation of the 5th lumbar vertebral body in the sacrum.
 - 1.2 **lumbarization** – persistence of the first sacral segment as a separate vertebra.
 - 1.3 over development of one or both transverse processes of the 5th lumbar vertebra.

CLINICAL MANIFESTATIONS

2. The abnormalities are present from childhood but do not produce symptoms then because the natural resilience of the relatively soft bone and the mobility of the spine do not lead to sufficient pressure on adjacent structures to cause pain.
3. Pain is the commonest feature and usually commences in early adult life when ossification of the vertebral column produces a stiffness which, with the asymmetrical position due to the anatomical abnormality, produces a significant pressure on the adjacent structures. There is often a history of trauma, such as a strain or twist, from which the symptoms date. Movement of the back is restricted and there may be flattening of the lumbar curve. Diagnosis is made by radiology.

AETIOLOGY

4. These anatomical variations are developmental in origin, being present at birth.

CONCLUSION

5. Variations of the anatomy of the lumbar and sacral vertebrae are described, these being developmental in origin.

REFERENCES

Duthie Robert B and Bentley George. Mercer's Orthopaedic Surgery. 8th Ed. 1983. Edward Arnold. p796.

Adams John Crawford and Hamblen David L. Outline of Orthopaedics. 11th Ed. 1990. Edinburgh. Churchill Livingstone. p166.

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