HUMERUS VARUS
Report of a Case Treated by Excision of the Acromion


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Congenital anomalies of the head of the humerus without any other developmental abnormality are rare. Kohler (1935) described the radiological criteria for the diagnosis of

![Figure 1](image1.png)

![Figure 2](image2.png)

Figure 1 - Pre-operative range of abduction. Figure 2 - Pre-operative radiograph showing impaction between tuberosity and acromion.

humerus varus as reduction of the head-shaft angle below 140 degrees, elevation of the greater tuberosity above the level of the superior margin of the neck, and reduction of the distance between the articular surface of the head and the lateral cortex of the humerus.

CASE REPORT

The patient, who was eighteen years of age when she first presented herself, complained of aching in the right shoulder and progressive limitation of abduction for five years. There was no history of injury. She was unable to abduct the arm actively more than 80 degrees, and lateral rotation was considerably limited; scapular movement was responsible for all but 20 degrees of her range. The other joints were normal. On examination under anaesthesia only a few degrees of added movement could be obtained.
Figure 1 shows the degree to which abduction was limited before operation and Figure 2 the radiographic appearance at approximately 45 degrees of abduction. It was at this point that pain was felt. The anomaly is well shown in this radiograph and the impaction of the enlarged tuberosity against the acromion can be appreciated. It will be noticed, too, that the shaft of the bone is narrower than normal, but there was no shortening of the upper limb which has been reported in association with the diminished neck-shaft angle.

_Treatment_—The acromion, against which the tuberosity appeared to impinge, was excised as far as the acromio-clavicular joint; this enabled the arm to be brought into almost full abduction, the last few degrees being limited by secondary shortening of the pectoralis major.

_Progress_—After operation she rapidly gained control of the increased range of abduction (Fig. 4). Lateral rotation was restored to normal. Figure 3 indicates that her present restriction at extreme range is due to contact between the tuberosity and the tip of the clavicle.

**Comment**—The simplicity of this procedure contrasts favourably with the more elaborate abduction osteotomies which have been carried out for the relief of this condition (Lucas and Gill 1947).

I am grateful to Mr B. H. Burns and Mr K. H. Young for allowing me to treat this patient and submit this report. I am also indebted to Mr K. Chant for the photographs.

**REFERENCES**