Correspondence

The glenoid notch and the shape of the glenoid cavity of the scapula

Studying the shoulder joint in a palaeo-osteological context in recent years, I have been struck, like Prescher & Klümpen (1997), by the lack of information about the glenoid notch provided by the standard anatomical texts; indeed equally unexplained is the pear-shape of the glenoid cavity itself.

The 7th (1947) edition of Buchanan's Manual of Anatomy, edited by Wood-Jones, states (p. 273) 'About a third of the way down the anterior margin [of the glenoid cavity] is a slight notch marking the attachment of the inferior glenohumeral ligament.' It is to be noted that it does not say that the attachment is responsible for the notch. Knowing Wood-Jones liked to look for himself in a hands-on way, I attributed this observation to him, mistakenly I now discover because the sentence appears to originate in the 5th edition (1933) edited by Barclay-Smith, Frazer, Parsons and Wright but with the additional words 'and comparable with the cotyloid notch of the acetabulum'. However, by the 6th edition (1937), edited by Frazer alone, that phrase had disappeared; perhaps he was glad of the freedom to eliminate this rather extravagant thought. I have no means of looking for myself, so must leave others, in particular Prescher and Klümpen, to judge whether this historical fragment is worth following up.

With regard to the pear-shape of the glenoid cavity, some surgical anatomical texts say that it provides a vertical axis for the movement of the head of the humerus and that, as soon as the arm is raised to shoulder-height, the head slides into what is the smaller upper part of the glenoid cavity (Bateman, 1978). Fahlström (1981), who goes more fully

into the matter than most, points out that, in this position, the range of movement is confined, which hints at some adaptive advantage and how the pear-shape may have evolved (Aiello & Dean, 1990).

A. E. W. MILES
Sub-Department of Anthropology,
Department of Palaeontology,
The Natural History Museum,
Cromwell Road, London SW7 5BD UK

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