



Langer's axillary arch—a term used through the years, but is it correct?

Re: Rajakulasingam R, Saifuddin A. Fullness in the left axilla—answer: Langer's axillary arch. *Skeletal Radiol* (2020). <https://doi.org/10.1007/s00256-020-03467-z>

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I read with great interest the article by Rajakulasingam and Saifuddin on the axillary arch muscle—“Fullness in the left axilla—answer: Langer's axillary arch” [1]. The case presents MRI images of two muscular slips from the anterior part of the left latissimus dorsi—one of the slips attached to the pectoralis major and the other one attached to the coracobrachialis. The muscular slips do not provoke any compression or displacement to the neurovascular bundle. The authors also briefly describe, although asymptomatic in their case, possible clinical implications of this variant muscle in the axillary region.

However, I want to make some additional comments and corrections regarding what we know about this anatomical structure.

Jelev et al. briefly present the most used terms defining this variation in the axilla—“arcus axillaris” (in Latin), “Achselbogen” (in German), “axillary arch” (in English), and “arc axillaire” (in French). Moreover, they summarize and present the terms that include Langer's name: “arc axillaire de Langer,” “Langers musculöser Achselbogen,” “Langerscher Achselbogen,” and “Langer's axillary arch” [2]. It should be noted that the first author who used the term was Testut [3]. However, in 1846, Carl Langer described as “Achselbogen” a fibrous thickening of the medial edge of the axillary fascia between the borders of the pectoralis major and the latissimus dorsi muscles [4]. Paturet is the first to point out that this muscular variation is incorrectly termed “arc axillaire de Langer” (Langer's axillary arch) [5]. Nevertheless, the term Langer's axillary arch is widely used today.

I would also like to point out that Carl Langer described this variant in 1846, not in 1894, as presented in the article of Rajakulasingam and Saifuddin. Moreover, in 1783, Bugnone is also reported to be one of the first descriptors of axillary arch muscle [6].

Rajakulasingam and Saifuddin reported different insertions of axillary arch muscle to the pectoralis major muscle, coracoid process, short head of biceps tendon, or coracobrachialis [1]. For more clarity and accuracy, I would also like to add the pectoralis minor and the axillary fascia as other sites of insertion [2].

Compliance with ethical standards

Conflict of interest The author declares that there is no conflict of interest.

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