

REVIEWER'S REPORT

Manuscript No.: IJAR-55533

Title: *Unusual absence of musculocutaneous nerve along with median nerve formation in midarm*

Recommendation:

Accept after major revision.....

Rating	Excel.	Good	Fair	Poor
Originality			√	
Techn. Quality				√
Clarity				√
Significance		√		

Reviewer Name: Dr. Sudheer Aluru

Detailed Reviewer's Report

This manuscript presents a cadaveric case report describing the absence of the musculocutaneous nerve associated with variant formation of the median nerve in the mid-arm rather than in the axilla. Anatomical variations of the brachial plexus are well documented; however, the combination of complete musculocutaneous nerve absence with delayed median nerve formation in the arm is relatively uncommon and has clear clinical relevance for surgeons, anesthetists, and neurologists.

However, the manuscript in its current form requires significant revisions to meet the standards of a scholarly anatomical case report. It is recommended for **major revision**.

Major Concerns:

1. Structure and Title:

- The manuscript lacks a clear title page. The title itself is descriptive but could be more concise (e.g., "Absence of the Musculocutaneous Nerve with Mid-Arm Formation of the Median Nerve: A Case Report").
- The abstract is poorly structured and contains grammatical errors, making it difficult to follow. It should be rewritten to clearly state: Background, Case Description, and Clinical Significance.

REVIEWER'S REPORT**2. Scientific Content and Accuracy:**

- (a) **Abstract & Introduction:** The description of the brachial plexus is incorrect and confusing. The statement "The lateral root of the brachial plexus issues three branches namely musculocutaneous nerve, lateral root and lateral pectoral nerve" is logically flawed (a root cannot issue a root). Furthermore, the lateral cord (not a "root of the brachial plexus") gives off these branches. Standard descriptions (e.g., trunks, divisions, cords) should be verified and presented accurately. Line 4–5: *"The lateral root of the brachial plexus issues three branches..."* The **lateral cord**, not—lateral root, gives branches.
- (b) **Introduction:** The literature review is presented as a list but lacks synthesis. The cited percentages for MCN origin (Arora and Dhingra, 2005) are not integrated into a coherent narrative about the prevalence and types of variations. The introduction fails to clearly establish the gap that this specific case (MCN absence *combined with* mid-arm MN formation) fills.
- (c) **Case Presentation:**
- The methodology is vague. "Standard dissection technique described in Cunningham's manual" is insufficient. A brief description of the dissection approach should be included. It would give necessary volume to the manuscript.
- (d) **Discussion:**
- The discussion is weak. It primarily states that variations exist and lists other authors who have found MCN absence, but it does not adequately **compare and contrast** this specific case with those previous reports. The claim that the combination is "rare" is not strongly supported by the presented citations.
 - The mention of Le Minor's (1992) Type V classification is a good start but needs expansion. What exactly defines Type V? How does the mid-arm formation in this case represent a sub-variant or difference from the classic Type V? This is the core of the case's novelty and should be the focus.
 - The clinical implications section is generic. It would be strengthened by a more specific discussion: e.g., "In this variation, a mid-arm incision or humeral fracture could jeopardize the *formation site* of the MN, potentially leading to a unique combined deficit of both median and musculocutaneous functions from a single lesion." Or something similar

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3. References: The reference list is inconsistent and contains errors. Book references are missing with chapter names. Journal references are inconsistent with names and numbers. Every reference needs to be verified. I cite couple of examples for reference.

(e) **Incorrect citation** mentioned: Malukar O, Rathva A. (2011) A study of 100 cases of Brachial plexus. *Nat J Comm Med*;2(1):66-70.

Correct citation: Malukar O, Rathva A. A Study Of 100 Cases of Brachial Plexus. *Natl J Community Med [Internet]*. 2011 Jun. 30 [cited 2026 Jan. 3];2(01):166-70. Available from: <https://njemindia.com/index.php/file/article/view/1871>

- **Incorrect citation** mentioned: Rao PV, Chaudhary SC. (2001) Absence of Musculocutaneous ~~Classification of communication between the Musculocutaneous and median nerves.~~ two case reports. *Clin. Anat.* 14(1):31-5.
- **Correct citation:** Prasada Rao, P. V., & Chaudhary, S. C. (2001). Absence of musculocutaneous nerve: two case reports. *Clinical anatomy (New York, N.Y.)*, 14(1), 31–35. [https://doi.org/10.1002/1098-2353\(200101\)14:1<31::AID-CA1005>3.0.CO;2-Y](https://doi.org/10.1002/1098-2353(200101)14:1<31::AID-CA1005>3.0.CO;2-Y)

4. Language and Grammar:

- The manuscript requires thorough proofreading by a native English speaker or a professional editing service. There are numerous grammatical errors, awkward phrasings, and typos (e.g., "inaddition," "musculocutaneousmuscles," "median root of medial cord" in Case Presentation line 60 contradicts Introduction line 39).
 - The first passage describes your cadaveric finding (variation).
 - The second passage describes normal anatomy (from textbooks).
- *There is no conceptual contradiction between the two descriptions if one refers to normal anatomy and the other to a variant; however, the manuscript does not sufficiently distinguish between these contexts. Additionally, the description of fiber composition of the median nerve roots is anatomically incorrect and must be corrected. Failure to clearly separate normal anatomy from variation may confuse readers and weaken the anatomical rigor of the manuscript.*

Minor Concerns:

- The clinical significance statement about "loss of flexion and adduction of arm" (Conclusion) is imprecise. The MCN does not innervate an adductor of the arm. The intended meaning is likely "flexion at the shoulder" (via coracobrachialis).
- The mention of the MBBS batch year ("2025-2026") is irrelevant to the scientific content and should be removed.

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- While the study involves a cadaver, ethical considerations must be addressed. The authors should state whether institutional review board (IRB) approval or an ethics committee waiver was obtained for the anatomical study, or confirm that the cadaver was donated for educational and research purposes under established institutional protocols. This information should be added to the 'Case Presentation' or 'Methods' section.

Final Recommendation:

The described anatomical variation is valid and worthy of documentation. If the authors can comprehensively address the major concerns above—particularly the anatomical accuracy, the integration and analysis of previous literature, and the presentation clarity—the manuscript has the potential to be a valuable addition to the anatomical literature. The current version, however, is not acceptable for publication.

The given figures should give an anatomical clarity for the authors

