

Review report

Final title: Surgical retrieval of a migrated peripherally inserted central catheter guidewire in an acute myeloid leukaemia patient: A case report

Title at submission: Surgical retrieval of a migrated PICC guidewire of an AML patient: A challenging case report



Reviewer: Kazi Mahzabin Arin, ORCID: [0009-0004-0064-3847](https://orcid.org/0009-0004-0064-3847)

Overview

This case report is valuable as it highlights the need for increased vigilance during the insertion of peripherally inserted central catheters (PICCs). It underscores the significance of enhanced training for healthcare professionals involved in such procedures. But, without proper training, sophisticated interventions like this should not be performed. The author doesn't specify who conducted the procedure, which is noteworthy. Complications can arise in any medical intervention, and it is essential to manage them promptly, a point the author has rightly addressed. However, I believe the call for improved training in this context is somewhat inappropriate.

1. Comment Please write PICC and AML in full form in the title. Omit the word 'challenging' from the title.

Response The word 'challenging' has been omitted, and the title of the manuscript changed accordingly.

2. Comment Line no. 47: Please replace the phrase "medical procedures" as it is a broader term with "central venous access" in the objective.

Line no. 47: Please replace the phrase "iatrogenic complications" with "preventable mishaps".

Response Both the words have been replaced in the manuscript and objective.

3. Comment 1. Figure 1 (iii) is not clear. This figure can be omitted.

2. In figure 1 (v), chest X-ray showing an opacity in the middle zone of the right side and lower zone of the left side? Please explain those in the case management section as you mentioned in line no. 70 "there were no complications during the patient's recovery"

Response Figure 1(iii): This photograph, taken during the surgical procedure, is currently being edited to include an arrow indicating the closed stoma over the SVC.

Figure 1(v): The X-ray shows a small accumulation of fluid due to the thoracotomy surgery.

4. Comment The number of figure (s) could be decreased.

Response All figures are grouped in one figure.

5. Comment Line no. 89: Please elaborate on the challenges of surgical retrieval in the discussion. Line no. 89: Please write HD in full form. Line no. 93: Here you wrote that previous case studies underscore the critical role of surgery where non-invasive interventions prove ineffective. But in your case, you didn't mention about noninvasive methods. Please explain this point.

Response The word 'HD' was replaced with "haemodialysis" and tried to clarify the challenges for surgical retrieval specially in patients with compromised vascular integrity.

6. Comment Line no. 79. The reference (6) of "catheter migration rate" is inappropriate here as the case report is on guidewire migration.

Response Since this reference was included in the discussion, we consider the term 'catheter migration rate' to be appropriate for characterising iatrogenic complications.

7. Comment To improve the storytelling, please address-

1. Line no. 52: Please mention who (nurse, anaesthesiologist, or other) did the PICC line insertion. 2. Line no. 54: Please comment on why they shifted the patient. Is there no facility to manage that situation? If not, mention it in the case description. 3. Line no. 60: Please explain why you chose the open thoracotomy. If a radiology-guided endovascular procedure is not available in that hospital, you need to mention it. 4. Line no. 60: Here you mentioned "a right anterolateral thoracotomy for guidewire removal was proposed." Please mention who (professional position) proposed that. 5. Line no. 89: You mentioned here "Our case report highlights the challenges of surgical retrieval," but nowhere the challenges are mentioned.

6. Line no. 90: "in patients with" is inappropriate here as in this sentence you are referring to your case.

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Responsible editor

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Keywords

guidewire migration, surgical retrieval, PICC line

Ethical approval

Ethical approval was not sought because this is a case report. However, written informed consent was obtained from the patient for publication of this case report and any accompanying images.

Funding

None

Trial registration number

Not applicable

Response The case description has been modified to reflect the reviewer's suggestions line by line. Unfortunately, a thorough explanation could not be included due to the journal's word count constraints for case reports. It is essential to emphasise that a team of specialists, including cardiac anaesthesiologists, cardiovascular and thoracic surgeons, and a haematologist, collaborated in the patient's treatment.

- 8. Comment**
1. Figure 1: Line 156: Please write this line "Postoperative x-ray showing no guidewire left" in the following manner; it will be more formal. "Postoperative chest X-ray clearly demonstrate that there is no retained guidewire."
 2. Lines 32 and 95: Please replace the phrase "healthcare providers" with "healthcare professionals" as it would be more formal.
 3. Line no. 31: please write "critical" incidents.
 4. Line no. 33: Please rewrite this point, omitting the word iatrogenic.

Response All the points, including the figure legend, appropriately addressed according to the reviewer's suggestions.

Reviewer: Md. Abir Tazim Chowdhury, ORCID: 0000-0001-7891-2788

Overview

The manuscript presents a rare but clinically significant complication related to PICC line insertion in an AML patient. The interdisciplinary approach and surgical management are clearly outlined. The structure adheres well to case report standards, including learning points, introduction, case details, discussion, and references.

- 9. Comment** Consider modifying the title for clarity and conciseness.
Example: "Surgical Retrieval of a Migrated PICC Guidewire in an AML Patient: A case report"

Response We modified the title.

- 10. Comment** Several sentences require minor grammatical revisions. For instance:
Line 77: "...but this serious complications..." → should be "...but these serious complications..."
Line 52: "...for chemotherapy at the previous hospital, an unexpected complication occurred." → Consider revising to clarify temporal sequence: "...an unexpected complication occurred during chemotherapy catheter insertion at the previous hospital."

Response Language and grammatical corrections have been made according to the reviewer's suggestions.

- 11. Comment** While references are relevant, the discussion could better differentiate between PICC-specific and general central venous catheter complications. Consider emphasising that most guidewire migration literature pertains to central lines, and PICC-specific incidents are rarer.

Response Thanks for your valuable comment. We agree that PICC-specific guidewire migration is rare, so literature support is lacking. We even tried to modify the discussion to make it better for PICC-specific incidents.

- 12 Comment** The surgical steps described are informative but may benefit from greater detail, e.g., how the guidewire was palpated and retrieved (was it looped? free-floating?).

Response Thanks for your concern. A detailed description of surgical steps will increase the volume of the manuscript, which does not comply with the journal's specific word count.

- 13. Comment** The figure descriptions (page 7) should be incorporated more cleanly in the main text. Also, label the individual subfigures (i, ii, iii...) clearly in the actual images.

Response We have incorporate figure the description in the main text.
Labelling individual figures is not possible as all figures are grouped into one figure per the journal's policy.

Responsible editor: Md Nahiduzzamane Shazzad, ORCID: 0000-0002-8535-4259

- 14. Comment** Please avoid using acronyms in the title and use only a case report instead of a challenging case report.
The introduction should be more detailed, focusing on the justification of case reporting. A good framing of the figure is required.

Response The title has been changed to: "Surgical retrieval of a migrated peripherally inserted central catheter guidewire in an acute myeloid leukaemia patient: A case report."
A slight modification has been made to the introduction section to make it more justifiable for our case report.
The figure also replaced and made more specific.

- 15. Comment** Please substitute the learning points with "Key messages" described in 50-60 words. Also, submit a revised manuscript that addresses the reviewers' feedback along with a detailed point-by-point response.

Response We substituted 'Learning points' with 'Key Messages' within 52 words.
A revised manuscript has been submitted, which includes a point-by-point response to review comments.