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| Book Name: | [Engineering Research: Perspectives on Recent Advances](https://www.bookpi.org/bookstore/product/engineering-research-perspectives-on-recent-advances-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_** |
| Title of the Manuscript: | **Need for Computerized Automated Machine (CAM) for finding THR issues in Patients** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Journal of International Journal of Innovative Technology and Exploring Engineering, 8(7C2): 220-225, 2019.**

**Available:** [**https://www.ijitee.org/portfolio-item/G10510587C219/**](https://www.ijitee.org/portfolio-item/G10510587C219/)

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This chapter addresses an urgent but under-served clinical gap: reliable, technology-based surveillance for late complications after total hip replacement (THR). Aseptic losening, mal-position–related instability and polyethylene wear remain leading causes of revision, yet follow-up compliance drops sharply after the first postoperative year. By proposing an automated computer-based screening system, the authors encourage orthopaedic surgeons and biomedical engineers to collaborate on scalabele, cost-effective solutions that could flag at-risk patients early and reduce the economic and biological cost of revision surgery. With refinement and stronger methodolgical framing, the chapter could become a useful primer and roadmap for future interdisiplinary work in this area. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Partially**.**  “Computerized Automated Machine” repeats the idea of automation twice; “machine” already implies automation.  “Issues” is imprecise; standard orthopedic language would use “complications” or “failures.”  Readers should understand that the chapter focus on post-operative detection rather than surgical technique.  My suggestions:  “An Automated Computerized System for Detecting Post-THR Complications.”  “Expert-System Approach to Early Detection of Total Hip Replacement Failure.” |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | No.  1. The abstract does not describ how the proposed CAM operate (e.g., rule-based expert system, machine-learning classifier, image-processing pipeline). Add 1–2 sentence outlining the core algorithm or system architectur.  2. Even if the work is conceptual, the abstract should state what the chapter demonstrates (e.g. a prototype workflow, performance estimates, or a future research framework). Include at least one key takeaway or metric.  3. Ambiguous phrases: Sentences such as “permits individuals to measure a lot of active lives while not enfeebling hip pain” are grammatically incorrect and obscure in meaning. Re-phrase to: “THR enables patients to resume active lives free of disabling hip pain.”  Structire the abstract in four micro-paragraphs: Background - Objective - Approach (CAM description) - Conclusion/Implications. |  |
| **Is the manuscript scientifically, correct? Please write here.** | Clinically acurate in its premises but methodologicaly under-developed.  1. Sections 2–4 describe expert systems, KDD, and image processing in generic terms but never connect them to a concrete diagnostic workflow (e.g., radiograph input, feature extraction, decision rules, output flag). Provide a schematic diagram and step-by-step narrative.  2. Pure if-then expert systems struggle with imaging variability. Acknowledge contemporary alternatives (deep CNNs, transfer learning) and justify why chosen approach is suitable (e.g., transparency, low computational cost, availability of expert knowledge).  3. The conclusion states that CAM “improves joint stability and patient satisfaction” clams that require data. Either cite published validation or rephrase as anticipated benefits.  4. Extensive anatomy sections add context but curently do not feed into algorithm design. Show, for instance, how femur offset or cup inclination measurements will be parameters assessed by the CAM.  Recommendation: devote a dedicated “Proposed System and Workflow” section with subsections on Data sources, Image-processing steps, Knowledg base/rule design, Validation plan (even if prospective). |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | Quantity is acceptable; currency is not.  1. most of reference pre-date 2012. Add at least 8–10 references from 2018–2024 cover AI-aided THR diagnostics.  2. Include recent registry reports (e.g., UK NJRR 2023) to support revision rate statistics. |  |
| Is the language/English quality of the article suitable for scholarly communications? | 1. Numerous run-on sentences, subject-verb mismatches and mistranslated technical terms obscure meaning (e.g., “knowledge about the application domain” appears twice in one bullet).  2. Use either US or UK spelling throughout; avoid mixing “Computerised” and “Computerized.” Replace coloquialisms (“issues,” “a lot of active lives”) with precise clinical vocabulary.  Engage a professional scientific editor or bilingual colleague for a line-by-line copy-edit after restructuring. |  |
| Optional/General comments | I encourag the authors to add a workflow figure add a table of common THR failure signs add a proof of concept (even a small pilot could be beneficial) |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)*  None |  |

**Reviewer details:**

**Afshin Taheriazam, Islamic Azad University, Iran**