

Management of Persistent wound Ooze and Periprosthetic Joint Infections

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Introduction

- Persistent wound leakage (PWL) after TJA.

I- PWL

- Evidence-based clinical guideline is lacking.
- Incidence of PWL: 0.2% and 21% (variation in definition).
- Can be physiological in the first days after index surgery.
- Retrograde pathway for infection. Low threshold for early surgical.
- Timing of surgery: PWL >5 days increases infection in THR 42% and in TKR 29%
PWL > 5 days increase PJI by 12 folds.

PWL

- Definition: (*International Consensus Meeting (ICM) 2013*)
- >2 x 2 cm of drainage in the wound dressing beyond 72 hours after index surgery.
- It recommended surgical treatment should be performed if wound drainage persists for longer than 5-7 days after index surgery.

Proposed Classification of Persistent Wound Drainage After Total Joint Arthroplasty.

| Category | Description |
|---------------|---|
| 1 (Limited) | A stripe of blood in the wound dressing in the line of the wound or less than 2 × 2 cm in size ^a |
| 2 (Moderate) | More than 2 × 2 cm drainage in absorbent gauze or dressing but without the need for change in the wound dressing (ie, dressing is not soaked) |
| 3 (Excessive) | One dressing change per day due to soaked absorbent gauze or dressing |
| 4 (Massive) | Two or more daily dressing changes due to soaked absorbent gauzes or dressings |

^a According to the 2013 International Consensus Meeting on Periprosthetic Joint Infection [28,33].

- Category 1



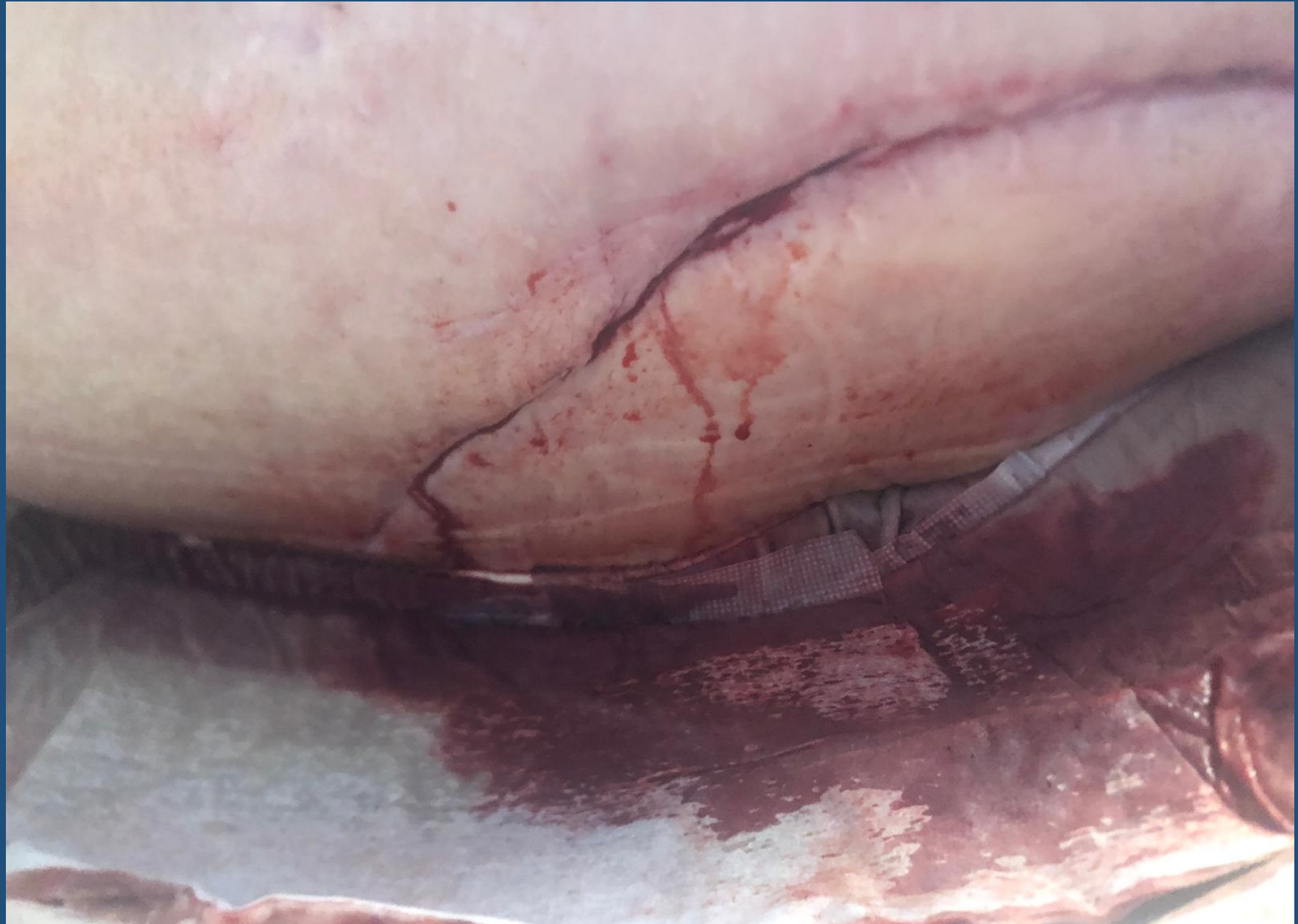
- Category 2



- Category 3



- Category 4



POD 2-4

- Cat 1 dressing/wound: Discharge and close f/u
- Cat2/3 dressing/wound: 1- Anticoagulants
2- Nutrition support
3- Pressure dressing + observe.
- Cat 4 dressing/wound: Theatre

POD 5-7

Still Cat 2/3:

- 1- Infection suspected clinically → Theatre.
- 2- Infection NOT suspected clinically: Bloods (CRP, WBC, ESR) + anticoagulants + Nutrition support + observe +/- scan.

POD 7-10

Still Cat2/3:

- 1- Infection suspected clinically &/or raised bloods &/or persistent cat3 OR New discharge after the wound being dry: → Theatre.
- 2- None of above & wound is settling: Repeat blood + close observation +/- scans.

Summary of management of PWL

- Know category of ooze.
- History (malnourishment, DM, intraoperative haemostasis, etc) and clinical examination for signs of infection.
- Diagnostic blood tests from day 4.
- Daily observation required.

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Swansea Bay University Health Board

Authorisation Form for Publication onto COIN

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| | |
|---|---|
| COIN ID. | CID4472 |
| Document Title. | Management of Persistent Wound Ooze and Periprosthetic Joint Infections |
| Name of Author. | Mr. Aso Mohammed, Consultant Trauma and Orthopaedics. |
| Name of Lead Pharmacist. | N/A |
| Is the document New, Revised or a Review of a previous version. | New |
| Where on COIN do you want the document to be published. | Musculoskeletal and Orthopaedics |
| Is the document relevant to the GP Portal. | No |
| Sign to confirm that the document has been authorised by an approved governance process in a specialty or delivery unit. | Discussed and approved in T&O Audit |
| If NICE guidance been considered/referenced when producing this document, please provide the title or reference number. | No |
| Please provide a brief description/abstract of the document. | Management of Persistent Wound Ooze and Periprosthetic Joint Infections |
| Equality Statement. <i>(All policies and procedures need to comply with CID76 Policy for the Management of Heath Board Wide Policies, Procedures and other Written Control Documents (WCD)).</i> | N/A |
| Published Date. | December 2022 |
| Last Reviewed Date. | |
| Next Review Due/Expiry Date. | December 2025 |