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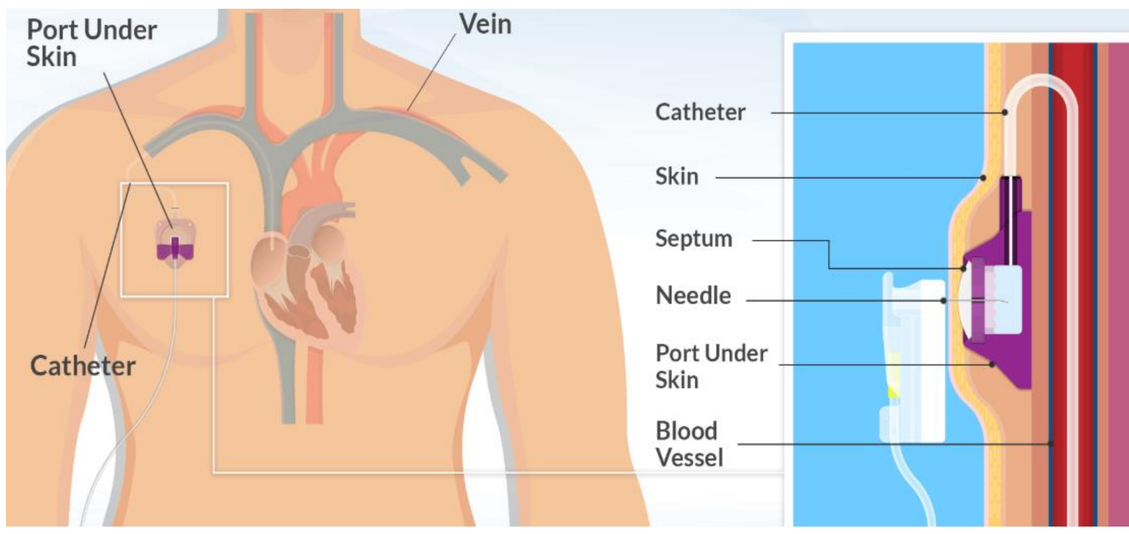
An Audit Of Antimicrobial Prophylaxis For Portacath Insertion

Background:

- Prophylactic antibiotics are widely used in interventional radiology for many procedures including placement of tunnelled central venous catheters, Portacaths, nephrostomies and tumour ablations.
- In our department, currently three consultants perform portacath insertions, with differing antibiotic prophylaxis regimens: two give prophylactic teicoplanin while one does not..
- Teicoplanin covers a range of Gram-positive bacteria, including Staph. Aureus and only covers some strains of VRE.
- Teicoplanin does not cover against all microbes such as pseudomonas aeruginosa.



Aim:

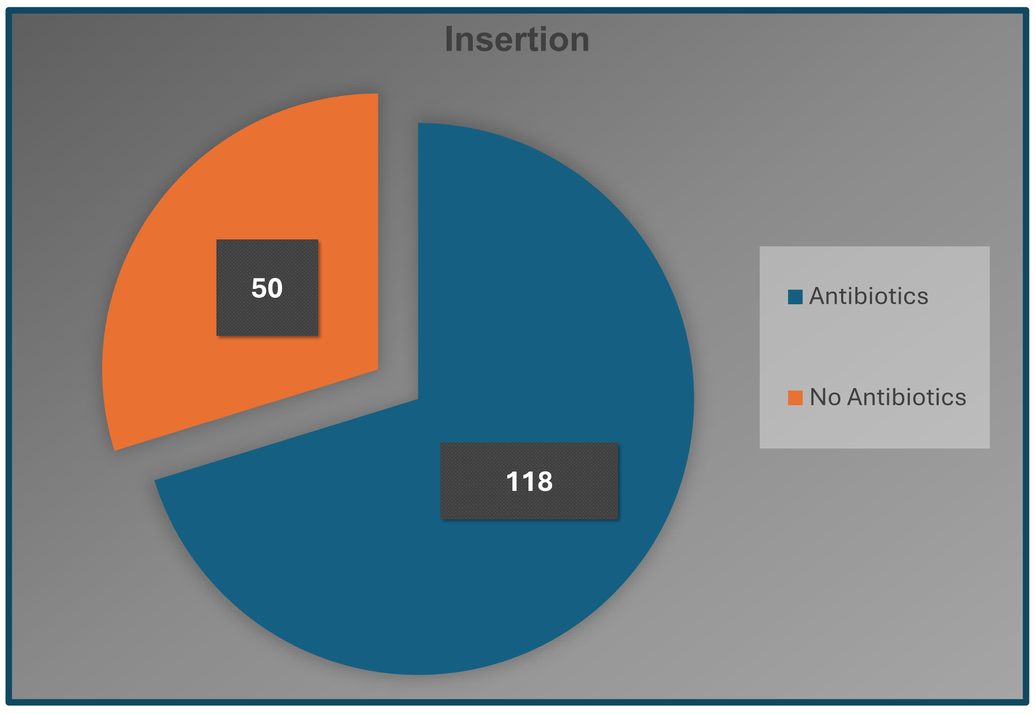
- To identify the difference, if any, in portacath infection rates between these two practices.
- For the purposes of this audit, infection was defined as the presence of clinical signs of infection such as swelling, erythema, and / or purulent discharge.

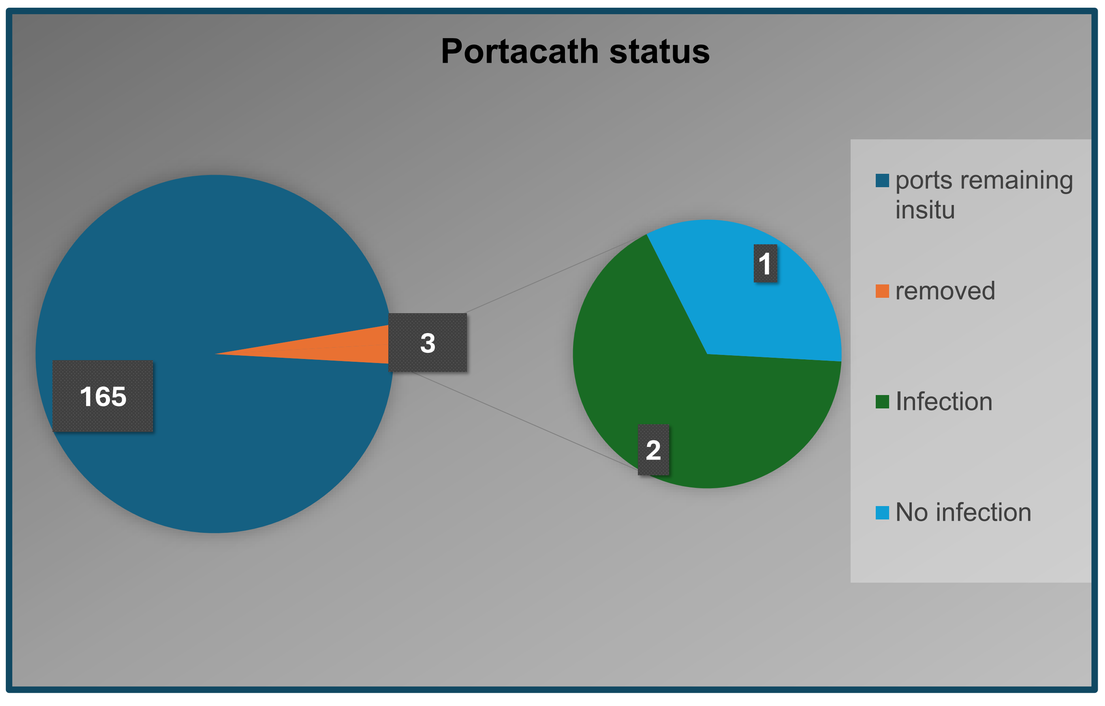
Methods:

- Data was retrospectively collected from the 1st of January to the 30th of September 2025, using PACS.
- The data was cross-referenced with T-pro-generated clinical letters and NIMIS requests.
- This data was subsequently cross-checked with blood and swab cultures results from iLab.

Results:

- In the 9-month period, 168 portacaths were inserted.
- Of the168 insertions, none were associated with microbiology-proven infections in the first 30 days post insertion.





- Of the infected portacaths removed, one which had been inserted with prophylactic cover had microbiology-proven infection with Pseudomonas grown from a wound swab.
- The second was inserted without antibiotic prophylaxis, had positive blood cultures for mixed Gram-negative bacilli, however this was presumed to have seeded from an identified septic abdominal source.
- The third port was removed as treatment was completed.

Conclusion:

- This audit demonstrates that there were no microbiology–confirmed infection within 30 days from portacath insertion regardless of prophylaxis status.
- Infections following this period are more likely related to line care rather than infection introduced at the time of insertion.
- The infections that did occur outside the 30-day window involved organisms that are not covered by teicoplanin.
- These findings supports the hypothesis that routine antibiotic prophylaxis is not required for portacath insertions.

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