

A COMPLETION LOOP AUDIT REGARDING THE PRACTICE OF SENDING PUS SWAB FOR CULTURE AND SENSITIVITY IN PILONIDAL ABSCESS DRAINAGE

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INTRODUCTION

- **Incision and drainage of abscesses** is one of the most common emergency procedure performed in General Surgery.
- Taking **Pus swabs** or pus aspirate is routinely performed during these procedures for culture and sensitivity.

OBJECTIVES

- ✓ **Primary Aim:** To determine the role of wound swab in the management of the patients with pilonidal sinus abscess with antibiotic therapy thereby analyzing the proportion of patients with acute pilonidal abscess and it's timely diagnostic value.
- ✓ **Secondary Aim:** To identify the most common microorganisms cultured from patients with acute pilonidal sinus abscess.

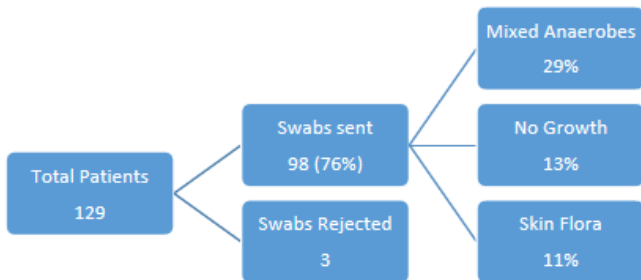
METHODS

- This was a **final cycle (completion)** of our audit performed on patients presented with acute pilonidal abscess and underwent I&D from June 2019 to October 2020.
- The **parameters** like patient demographics, whether or not pus sent for microbiological examination, subsequent report, time required for sample processing, whether prescribed pre-operative antibiotics were appropriate or were changed as per Swabs C/S reports

FIRST CYCLE

- ❖ **First Cycle** June 2019 to October 2019
- ❖ One hundred and twenty nine patients **underwent I&D** for pilonidal abscess
- ❖ After disinfecting the skin - opening the abscess - swabs were obtained with **cotton tipped swabs**
- ❖ Swabs were taken intra-operatively were sent for micro-biological examination i.e. **cultural and sensitivity**

RESULTS



Parameters	Results
Patients Included	129
Antibiotics Prescribed	123 (96%)
Length of Stay	2.1 days
Time for reporting	4.3 days

STANDARD

- NICE CKS Guidelines** for Treatment of Acute Pilonidal abscess:
- **Urgent Incision and Drainage**- same day of presentation
 - Consider **Antibiotics** if associated with cellulitis
 - **No mention** about the role of Pus swab

INTERVENTION

- Following **measures** were taken to change clinical practice:
- Presentation at **Departmental Audit Meeting**
 - **Teaching sessions** for Junior doctors
 - **Educated** theatre staff
 - **Posters** were put up in Surgical Doctors room & clinical areas as effective way of communication, awareness & teachings

OUTCOME

	First Cycle	Second Cycle
Patient Audited	129	121
Swabs Sent	98 (76%)	70 (58%)
Antibiotics Prescribed	96%	80%
Time for reporting	4.3 days	4.1 days

COST SAVING

Factors	Cost (Estimation)
One swab processing	£13.55
Swabs sent per month	40
Money saved per month (Hosp)	542
Money saved per year (Hosp)	6504
Money saved over year (Trust)	32520

DISCUSSION

- ◆ Post-operatively, most patients were commonly **discharged prior** to the wound swab results becoming available
- ◆ The majority of patients who were prescribed antibiotics at discharge were **covered for anaerobic** (& aerobic) micro-organisms.
- ◆ **Drawback** - We did not look into the recurrence rate and those presented to A&E with abscess at the same location
- ◆ **Limitations** - Prior use of antibiotics prescribed by GPs may have affect wound swab laboratory tests in some cases

CONCLUSION

- Although, pus swabbing is good principle, however, Our study re-demonstrated that swabbing did not alter these patients management, hence **unnecessary & expensive**
- The avoidance of routine swabbing for culture and sensitivity was significantly cost-effectives

REFERENCES

1. Shabbir J, Chaudhary BN, Britton DC. Management of sacrococcygeal pilonidal sinus disease: a snapshot of current practice. Int J Colorectal Dis 2011;26(12): 1619-20.
2. Chao C, Jiun ML, Krinalkumar M. The Role of Wound Swab Microbial Cultures and Antibiotic Sensitivity Results in the Management of Sacrococcygeal Pilonidal Abscess. J Acute Care Surg. 2020;10(1):5-9.