

Audit of empirical first line antibiotic therapy for in-patients at St. Andrews Hospice, Airdrie.

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INTRODUCTION

- Antibiotic usage within the hospice setting is increasing.
- Inappropriate prescribing also puts patients at increased risk of developing clostridium difficile infection.
- One important aspect of palliative care is to improve the quality of life of each patient.
- It is therefore important that patients are not put at unnecessary risk of infections due to poor prescribing habits resulting in worsening symptom burden and a potential admission to hospital.

AIM: Review antibiotic prescribing standards

METHODS

A retrospective analysis was undertaken of all patients admitted to St Andrews Hospice during the months of August 2010 and October 2011.

- First cycle August 2010.
- Results disseminated to medical staff at a management meeting.
- Action taken : Presentations at medical meetings, policy guideline posters and hospice policy folder updated.
- Second cycle October 2011.
- Data Analysis: StatsDirect (www.statsdirect.co.uk), Chi² test with Yates correction.

RESULTS

Cycle 1: 60 patients, August 2010

- 19 (32%) patients administered with antibiotic therapy (all oral)

- 22 courses of antibiotics in total administered:

- 27% antibiotic prescriptions adhered to policy
- 68% prescriptions not adhering to policy
- 5% incomplete prescription documentation

Cycle 2: 60 patients, October 2011

- 15 (25%) patients administered with antibiotic therapy:
 - 14/15 (93%) oral therapy
 - 1/15 (7%) intravenous therapy

- 15 courses of antibiotics in total administered:

- 87% antibiotic prescriptions adhered to policy
- 13% prescriptions not adhering to policy

RESULTS

Figure 1: Cycle 1 - August 2010

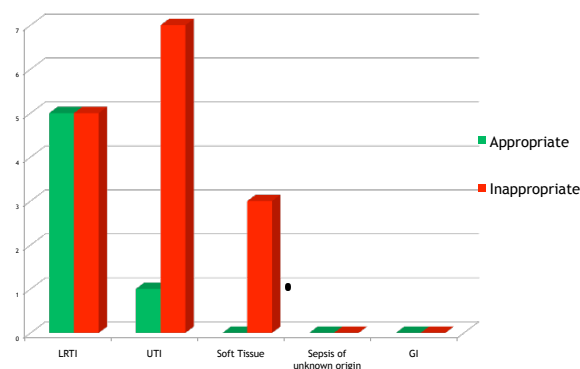
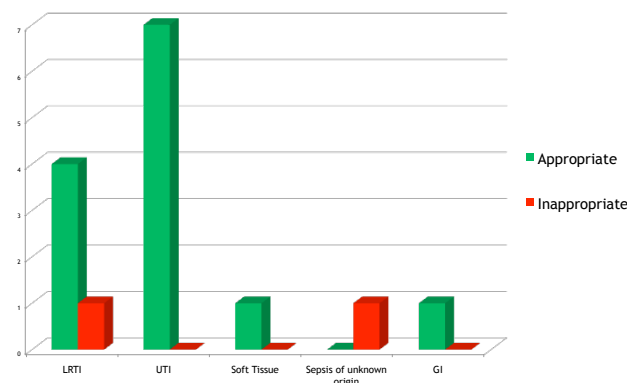


Figure 2: Cycle 2 - October 2011



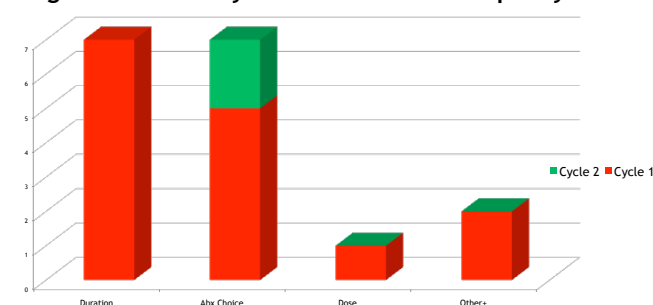
REASONS FOR NON-ADHERENCE	CYCLE 1	CYCLE 2
Duration	7	0
Antibiotic Choice	1	2
Dose	1	0
Other*	6	0

Other reasons for non-adherence:
* Combination of inappropriate dose, choice and duration, Intravenous co-amoxiclav used for broad-spectrum cover in PUO, 3rd line antibiotic prescription oral route chosen due to patient preference

SUMMARY OF RESULTS

- Guideline adherence was superior following the intervention [$p = 0.0013$].
- 60% improvement in overall antibiotic prescriptions adhering to policy.

Figure 3: Summary of non-adherence to policy



CONCLUSION

- Results of cycle 1 demonstrated an improvement was needed in compliance with antibiotic prescribing policy (27%).
- Cycle 2 demonstrated a 60% improvement in compliance with antibiotic prescribing ($p = 0.0013$).
- Further auditing of antibiotic prescribing should occur to further improve adherence to the policy.