

ANTICIPATORY SYRINGE DRIVERS IN END OF LIFE CARE: A RISKY BUSINESS?

An audit of their use in a hospice Inpatient Unit

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INTRODUCTION

The Association of Supportive and Palliative Care Pharmacy (ASPCP) recently stated that the perceived benefit of the anticipatory prescribing of a syringe pump (driver) does not outweigh potential risks.²

The committee cited the following specific risks:

1. A lack of individualisation.
2. No anticipation of dose/drug changes between prescribing and initiation.
3. Administration errors.¹

Anticipatory syringe pump prescribing appears relatively common in some areas of the UK, given the potential associated risks, and its use has possibly increased during the COVID-19 pandemic³.

Prescriptions should be based on an assessment of individualised care needs, with the agreement of the patient wherever possible and family caregivers^{5,6}.

This involves a suitably skilled prescriber assessing likely needs and responding sensitively to patient and family questions regarding the purpose of the anticipatory syringe pump^{4,5}, as well as a healthcare professional (usually a nurse) recognising an appropriate time to commence the driver.

Guidance from the National Institute for Health and Care Excellence (NICE)⁷, Healthcare Improvement Scotland⁸ and the British Medical Association⁹ lacks clarity about anticipatory syringe drivers. NICE guidance simply advises ensuring suitable anticipatory medicines and routes are prescribed as early as possible. This is an area of practice that has needed clear national guidance for some time.

AIMS AND OBJECTIVES

- Our aim was to evaluate our practice against the standards set out in The Gosport Report of 2018¹⁰.
- This indicated that many anticipatory drivers were being started in a 'routine manner' instead of being properly reviewed, leading to harm and even early death of patients (particularly with opioids).
- After publication of the report, the following standards were agreed for all anticipatory prescribing:
 - Appropriate doses of drugs prescribed.
 - Appropriate indications for drugs documented.
 - Instructions when to start are documented.

METHODOLOGY

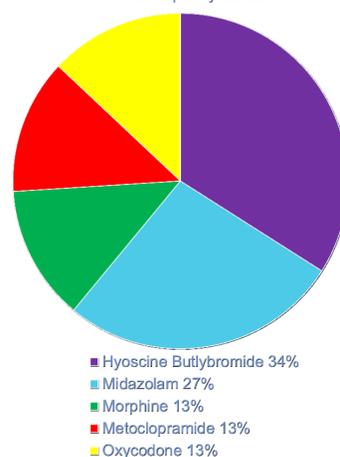
- A retrospective audit of all admissions to the Birmingham St Mary's Hospice Inpatient Unit (IPU) between 1st July to 1st October 2021 was performed.
- All drug charts were checked for the presence of an anticipatory driver. If prescribed, doses were checked for appropriateness, and any indication or instructions regarding when to commence were documented.
- Furthermore, clinical notes were analysed to establish the context for the driver being commenced.

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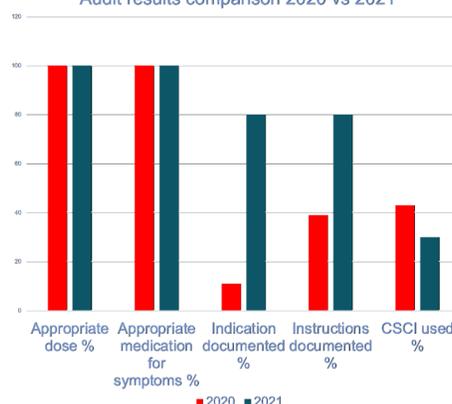
IMPORTANT RESULTS AND CONCLUSIONS

- 73 patients were admitted to IPU between 1st July and 1st October 2021.
- 46 syringe drivers were prescribed, of which 21% were anticipatory.
- 10 (100%) of the anticipatory drivers were prescribed for patients who died on IPU, and who appeared to be deteriorating with unstable symptoms.
- Starting doses were appropriate in all cases.
- 8/10 of the anticipatory drivers had a clear indication documented.
- 2/10 drivers (the same two drivers that had no indication documented) also had no instructions documented.
- In 80% of cases, instructions were present only on either the drug chart or the clinical notes, not both.
- "Agitation" was the most common indication documented (30%).
- Only three (30%) of all PRN drivers were administered, and the decision to administer was made by the nurse caring for the patient.
- All 10 PRN CSCIs were prescribed before 5pm.
- 2/3 anticipatory drivers that were used were administered out of hours (after 5pm).
- There was an improvement in documentation of indication and instructions by at least 40% compared to when the audit was carried out in 2020 perhaps due to increasing awareness of risks.

Frequency of medications prescribed in anticipatory CSCIs



Audit results comparison 2020 vs 2021



DISCUSSION

- Anticipatory drivers are not used routinely in every hospice.
- The main alternative is to use stat doses of PRN subcutaneous medications to manage unstable symptoms.
- The potential benefit of anticipatory driver would be more robust symptom management at the end of life, with less need for repeated injections. This may be particularly useful in the community where patients may have to wait for nursing staff to become available.
- Recent publications highlight the risks of using anticipatory drivers, particularly where healthcare professionals are not experienced in prescribing these drugs and in recognising when it is appropriate to start the driver.
- Therefore, a hospice IPU setting may be a less risky environment for their use compared to the community, where staff may not have specific training or experience in palliative care.
- The use of a safe, appropriate anticipatory syringe pump relies on both an experienced prescriber and an experienced care-giver to decide when to administer.
- In our hospice, there was a significant reduction in prescribing anticipatory drivers from 2020 to 2021.
- Reasons for this could include increased awareness of risks given recent publicity, or due to a change in the junior doctor cohort.

RECOMMENDATIONS

- Improve documentation of indications/instructions both on the drug chart and in the clinical notes.
- Given the recognised risks of anticipatory drivers, they must continue to be prescribed with caution and only where experienced professionals are involved in the patient's care.
- Specific training and support in this area could be offered to community professionals and to junior doctors to reduce the recognised risk.

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