

INTRODUCTION

Pre-operative anaemia is an independent, modifiable risk factor for mortality and morbidity [1,2,3]. However, with the implementation of a multidisciplinary dedicated pathway it is possible to improve outcomes [1,2,3].

In 2014, we undertook a retrospective audit to identify anaemia and its consequences in primary joint arthroplasties. Following this and local PQIP data (Figure 1) [4,5] we developed a guideline for **pre-operative anaemia in major elective surgery** which was integrated in the pre-assessment clinics (PAC). This included a protocol for the administration of IV iron (Ferinject®).

AIMS

1. Compare baseline PAC haemoglobin (Hb) with post IV iron Hb;
2. Determine length of time from PAC to IV iron infusion;
3. Assess length of hospital stay (LOS) and complications;
4. Assess need for perioperative blood transfusion.

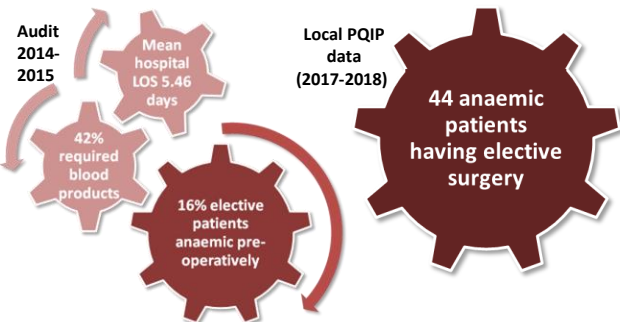


Figure 1. Summary of audit and PQIP results

METHODS

Review of care records of patients undergoing major elective surgery who had IV iron infusion following the implementation of our dedicated pre-operative anaemia pathway (March 2018). Data analysis performed using Microsoft Excel®.

RESULTS

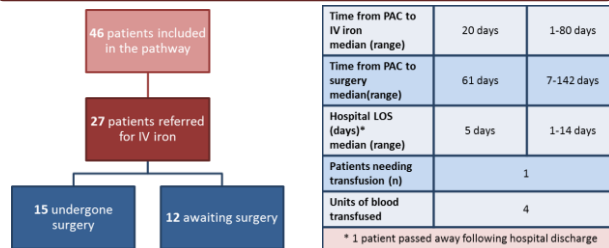


Figure 2. Flowchart of patients included in this study

Table 1. Details on surgical patients who had IV iron (n=15)

Baseline Hb versus post IV iron Hb

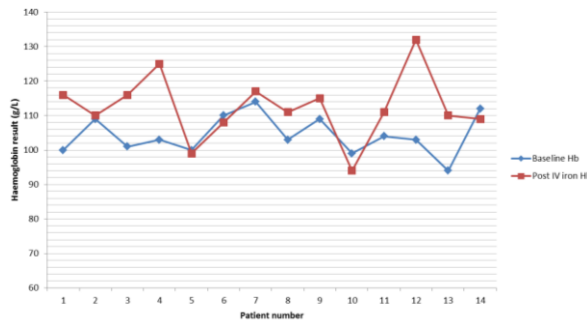


Figure 3. Comparison of baseline and post IV iron haemoglobin results in patients who have had elective surgery. Post IV iron Hb not available for 1 patient.

CONCLUSION

The implementation of a pre-operative anaemia pathway was crucial to identify anaemic patients booked for elective surgery and correct their anaemia prior to major surgery.

Our preliminary results suggest that anaemic patients having IV iron overall demonstrate an improvement in their preoperative Hb. Out of the 15 who had IV iron and underwent surgery, only 1 patient required perioperative transfusion of packed red cells (6.7%), supporting the role of pre-operative anaemia management.

DISCUSSION

The development and implementation of a preoperative anaemia pathway requires involvement of the major stakeholders right from the outset. A significant factor in the success of this pathway is the crucial role of the PAC nurses, in initiating the pathway after the initial PAC blood results. Its implementation also involved primary care, haematologists and surgeons, allowing the final project to be approved by the major stakeholders.

There are ongoing challenges, such as early identification of preoperative anaemia, and open communication between these teams is crucial to minimize disruption to the patient and avoid delays in surgery. Target patients also pose a challenge to the IV iron service, due to the urgency for IV iron infusions.

Ongoing data collection will enable us to have a better picture of outcomes for patients on the anaemia pathway.

REFERENCES

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