



The avoidance of prolonged corticosteroid use in newly diagnosed primary immune thrombocytopenia

Oxford University Hospitals **NHS**
NHS Foundation Trust

Kieran R Burton¹, Michael F Murphy¹

1. Oxford University Hospitals NHS Foundation Trust

INTRODUCTION

Corticosteroids are the mainstay of the pharmacological treatment for symptomatic or high bleeding risk immune thrombocytopenia (ITP). The high initial response rates must be balanced against a significant profile of adverse effects.

With the advent of proven alternative therapeutic options for the treatment of ITP, international guidelines and consensus statements have consistently recommended treatment regimes that would reduce corticosteroid use, both with shorter total courses and more rapid weaning schedules.

BACKGROUND

Current recommendations from Provan et al. ⁽¹⁾, suggest a maximum corticosteroid course of 56 days, with weaning from no later than 21 days for responders and 14 days for non responders.

Furthermore, British Society for Haematology guidelines ⁽²⁾ have recommended an assessment of the risk of osteoporosis with a FRAX score for all patients aged greater than 40, as well as bisphosphonate treatment for all patients greater than 70 or younger patients at high risk of fragility fracture.

METHODS

We studied the use of corticosteroids for all newly diagnosed primary ITP patients at a tertiary referral centre between July 2017 and June 2019.

A response to steroids defined as an improvement in the platelet count to more than $50 \times 10^9/L$

Patients with a documented contraindication to corticosteroid use, secondary ITP, pregnancy related ITP and mild ITP without a treatment indication were excluded

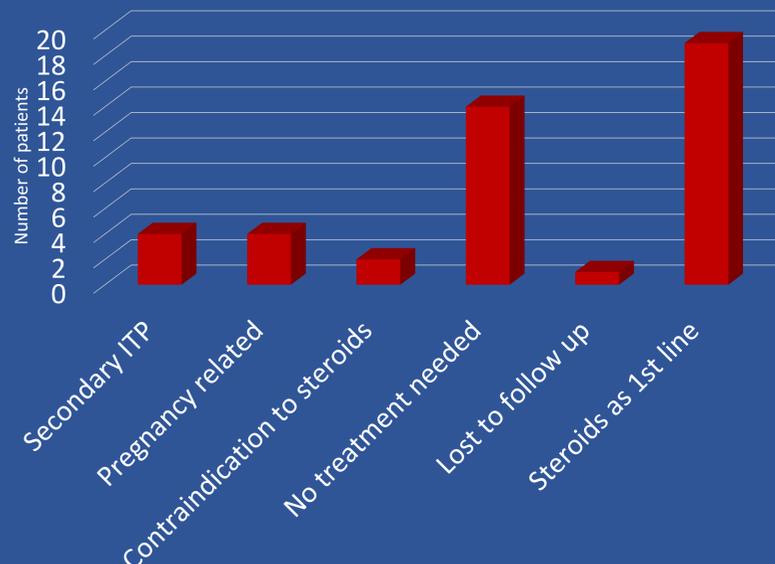
REFERENCES

- Provan et al., Updated International Consensus Report on the investigation and management of primary immune thrombocytopenia, Blood Advances, September 2019
- Hill et al., The prevention of glucocorticoid induced osteoporosis in patients with immune thrombocytopenia receiving steroids: a British Society of Haematology Good Practice Paper, British Journal for Haematology, 2019

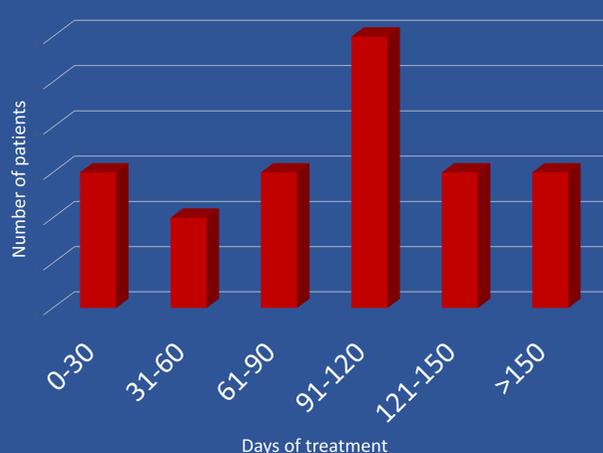
- Of 44 newly diagnosed patients, 19 were treated with corticosteroids as first line therapy.
- A response was observed in 89.5% of patients treated with corticosteroids.
- Corticosteroid weaning was commenced at a mean of 14.3 days into treatment, with a range of 3 – 60 days.

RESULTS

Initial management

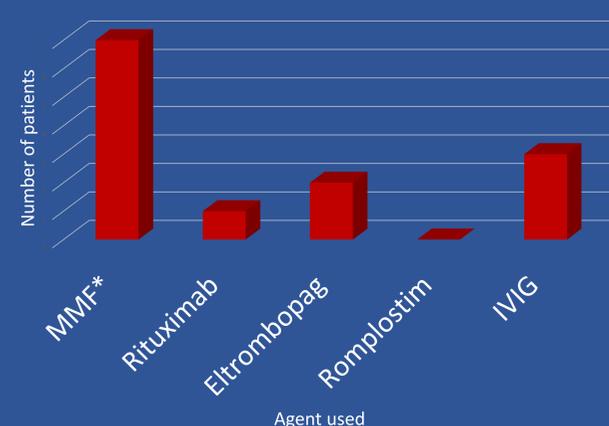


Length of total corticosteroid courses



- The total length of corticosteroid courses ranged from 18 to 373 days, with a mean of 111 days.
- 24% of responders relapsed on subsequent weaning.

Steroid sparing agents



* 4 patients were treated with MMF as part of the FLIGHT trial

- 67.5% of patients were started on a corticosteroid sparing medication
- Mycophenolate mofetil the most common choice (53%), followed by intravenous immunoglobulin (23%).
- The recommended maximum steroid dose of 80 mg was exceeded in 10.5 % of patients.
- Of those above 40, bisphosphonate treatment was administered in 2 patients and no patients had FRAX scores calculated.

CONCLUSIONS

These data demonstrate that prolonged courses of corticosteroids continue to be given for primary ITP with insufficient assessment of steroid related side effects such as osteoporosis. However, corticosteroid weaning is commenced within a good time frame and the majority of patients also receive a steroid sparing agent.

Further efforts are required to minimise total corticosteroid doses and mitigate their side effects, both on a local and national scale.

CONTACT INFORMATION

Kieran.Burton@ouh.nhs.uk