Monitoring of patients on immunosuppressive therapy for orbital inflammatory disorders: a re-audit

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1. Introduction

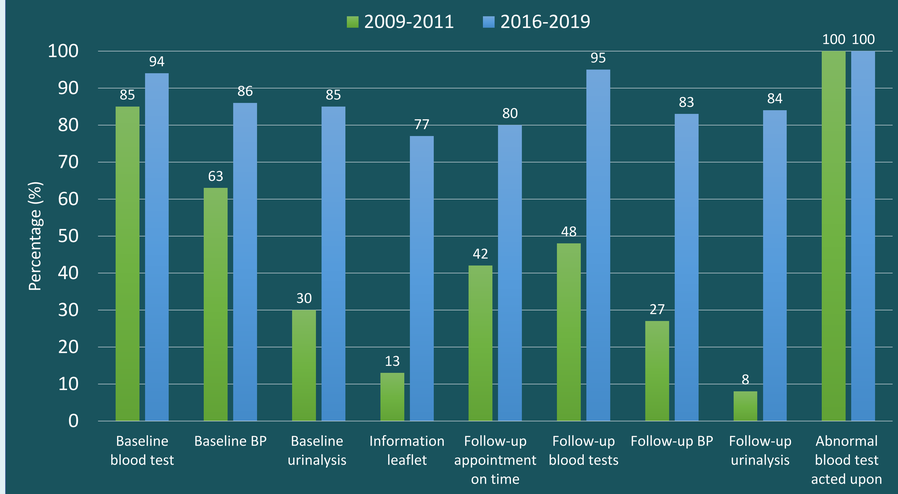
The use of immunosuppressive agents to treat Thyroid Eye Disease (TED) and other orbital inflammatory disease (OID) is well established at Bristol Eye Hospital. These patients need monitoring due to risk of subclinical adverse effects. In 2011, we audited the quality of monitoring against nine identified standards, including documentation of observations and appropriate blood results at baseline and follow up appointments. The initial audit showed poor compliance with standards despite a defined protocol. As a result, the Adnexal service introduced specialist immunosuppression nurses and standardised data sheets. We present a reaudit investigating the results of these service changes.

2. Method

We re-audited immunosuppression monitoring in our Adnexal service. The physical notes of 88 patients from 2016-2019 were reviewed against standards identical to the initial audit. The selection and exclusion criteria were:

- To have been seen at least twice by one of the adnexal consultants within the specified time frame.
- To be receiving any immunosuppressive agent prescribed within the service during that time.
- Patients were included if clinical records of the penultimate and ultimate follow-up appointment were available.
- Patients co-managed with another service were excluded if immunosuppression was managed by another service.
- Patients were excluded if their immunosuppression was prescribed primarily for a condition other than OID.

Fig.1: Percentage of patients receiving baseline and follow up monitoring



5. Conclusion

All standards have improved or remained at 100% . These results can be attributed to the introduction following the 2011 audit of specialised Adnexal immunosuppression nurses and standardised monitoring data sheets. This has improved patient safety and benefited the service by reducing doctors' workloads and improving efficiency of clinics due to reliable and effective monitoring and prevention of adverse effects.

Specialised immunosuppression nurses and standardised collection of immunosuppression data improve the safety of orbital patients receiving immunosuppressive treatments.

3. Results

In the re-audit cohort, baseline blood tests were documented in 94%, baseline BP in 86%, baseline urinalysis in 85%. 77% of patients received an information leaflet.

Follow up appointment timings were adhered to in 80% of patients with mean delay of 25 days (SD: 15.9, range 7-59 days) in delayed cases. Follow up blood tests were documented in 95% of patients of which 18% were solely recorded in primary care. 31% had recorded abnormal blood results of which 100% were acted upon appropriately.

Follow up blood pressure was documented in 83% of patients, follow up urinalysis in 84%.

In comparison with the initial 2011 audit, 8 standards improved in compliance with the remaining standard unchanged from 100%.

4. Discussion

The years 2020 – 2022 were purposefully omitted from analysis due to the COVID-19 pandemic. Patient management during this time was subject to inevitable disruption secondary to the pandemic, such as quarantine restrictions which interfered with in-person appointments. Thresholds for prescribing immunosuppression were raised, and many immunosuppressed patients were shielding, hence limiting follow up assessments in hospital. Hence in order to compare like for like with the initial 2011 audit, the years 2016-2019 were chosen for review.