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National clinical (re-) audit on managing adults with bullous pemphigoid 2024

In 2018, the British Association of Dermatologists (BAD) conducted a national clinical audit based on audit standards derived from the 2012 BAD clinical guidelines on the management of bullous pemphigoid. This re-audit was undertaken by the National Audit Sub-committee of the BAD over a 9-week period from the 12th February 2024 to the 15th April 2024.

Background and Introduction

Clinical audit support is one of the BAD's key objectives, providing data on quality standards in British dermatology. Clinical audits are important in their role to ascertain and improve the quality of care for patients. In 2012, the BAD published clinical guidelines on the management of bullous pemphigoid (BP) along with audit standards to aid implementation of the guidelines (Venning *et al.*, 2012). Adherence to audit standards was evaluated in 2018 (Smith *et al.*, 2020) with a re-audit being recommended after 5 years. Given the ongoing use of the 2012 guidelines and the evolving nature of healthcare practice, a re-audit was conducted in 2024.

Aims and Purpose

The aim of this national clinical re-audit is to evaluate current clinical practice amongst dermatologists in the UK in relation to the management of BP and compare the results with those from the 2018 audit. This will provide information regarding compliance with the audit standards and highlight any key changes in patient disease characteristics and practices.

Methodology

The BP clinical guidelines are accompanied by a clinical audit tool to support implementation. This identifies clear audit points for assessment, including the record of comorbidity, osteoporosis risk with corticosteroids treatment, patient satisfaction, and monitoring tests when on systemic medications. These standards were developed into audit questions and incorporated into an Excel spreadsheet for distribution.

The invitation to participate was circulated to the BAD membership via email in February 2024, with weekly reminders over a 9-week period. Members were requested to enter data for five consecutive adults with BP, per centre, who had been under hospital supervision (in part or completely) for at least 12 months. A chi-squared test was performed when comparing with the 2018 audit data for diagnostic variables and key audit standards.

Summary of key findings

A total of 91 responders provided data for 450 cases from 77 trusts/centres across 13 regions (Figures 1 and 2). The response rate for this audit was 32.2%, calculated based on the number of centres responding.

Patient population

Of 450 cases included in the audit, 152 (33.8%) had a diagnosis of BP confirmed with both direct and indirect immunofluorescence (IMF); 159 (35.3%) had direct IMF confirmation, which was significantly lower than in the 2018 audit (41.6%, p=0.04) and 85 (18.9%) had indirect IMF confirmation which was significantly higher than the 2018 audit

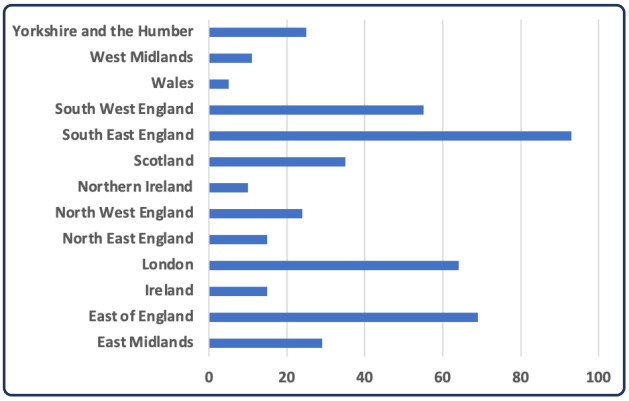

Figure 1. Bar chart showing the number of patients included in the audit across regions of the UK and Ireland.

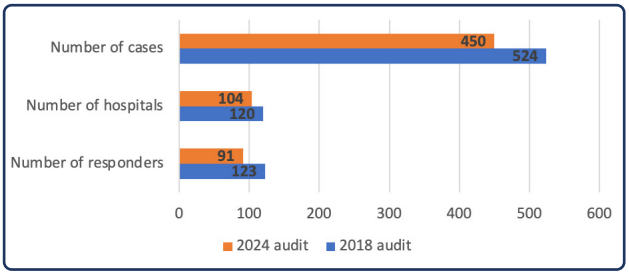

Figure 2. Bar chart showing the number of responders, hospitals and cases.

(10.3%, p=0.03). A total of 43 diagnoses (9.6%) were made on clinical assessment alone, which is not significantly different to the 2018 audit (p=0.26) (Figure 3). Considering cases in this audit period may have been influenced by altered practices in relation to the COVID-19 pandemic. This may reflect general trends away from clinic visits, where alternative investigations could be performed outside dermatology departments.

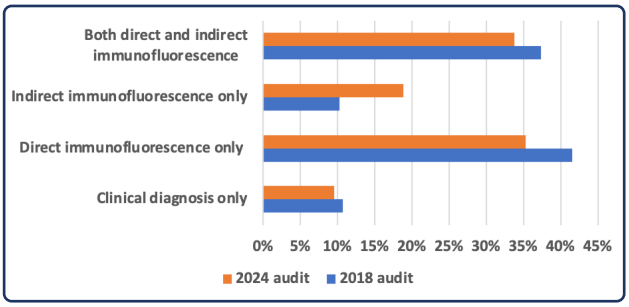

Figure 3. Bar chart demonstrating the percentage of BP patients diagnosed clinically and those diagnosed with IMF.

The median age of cases was 77 years. Baseline severity data were available for 324 cases (72%) at the outset and 295 (66%) at follow-up, where blister scores were provided (Figure 4 overleaf). Of the 324 cases with available data, 75 (23.2%) had a recorded baseline severity of very mild disease (<3 blisters), 68 (21.0%) mild (3-9 blisters), 106 (31.7%) moderate (10-30 blisters) and 75 (23.1%) severe (>30 blisters). There was a marked skew towards more severe baseline disease severity in

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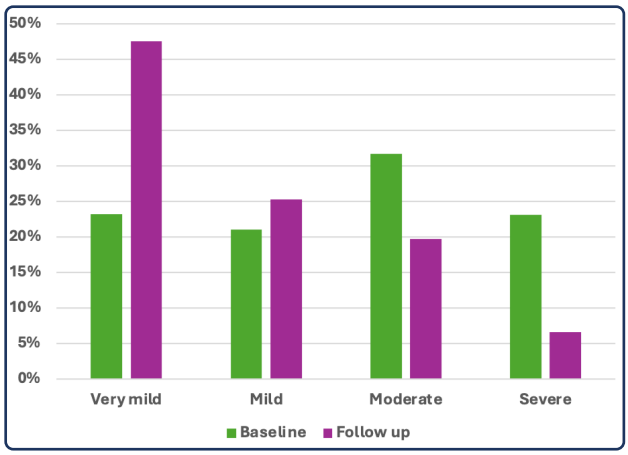

Figure 4. Bar chart showing the baseline severity of patient population compared to severity at second follow up.

the 2024 audit compared with the 2018 audit cases, which may reflect delays in presentation to and/or diagnosis in secondary care. At follow-ups, a total of 123 cases (47.5%) had <3 blisters at second follow-up, 68 (25.3%) had 3-9 blisters, 51 (19.7%) had 10-30 blisters and 17 (6.6%) had severe disease with >30 blisters.

BAD audit standards

a. Clear documentation must be recorded of the relevant and important comorbidities of diabetes and hypertension.

History of diabetes was recorded in 280 (62.2%) cases, and history of presence or absence of hypertension was documented in 244 (58.5%) cases (Figure 5). Record of blood pressure was documented in 176 (42.4%) cases, and HbA1c, as indication of diabetic status, in 244 (54.8%). These results were, generally, similar when compared with the 2018 audit responses.

b. Patients intended for oral corticosteroid treatment should have assessment for osteoporosis risk and documentation of its management.

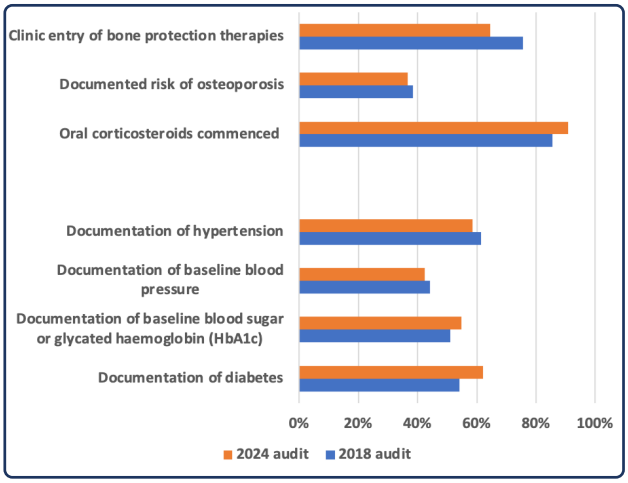

Figure 5. Bar chart demonstrating the percentage for 'yes' responses for bullous pemphigoid audit standards.

Of the 450 cases, 409 (90.9%) were commenced on oral corticosteroids at some point during treatment, either as initial therapy or at follow-up appointments. Recording of osteoporosis risk assessment was undertaken in 163 (36.7%) of cases, yet a higher proportion of cases (265 [64.6%]) received bone protection (less than the 2018 audit findings [75.6%, p=0.004]).

c. There should be evidence of the patients' satisfaction with the outcome of the treatment on control of their symptoms.

The audit standards published by the BAD recommend documenting either formal or informal evidence of patient satisfaction regarding symptom control. 276 out of 450 cases (61.3%) had documentation of patient satisfaction (Figure 6), which is similar to the 2018 audit data, whereas 220 out of 276 (85.6%) recorded satisfaction with their level of symptom control. A total of 42.7% (192 out of 450) recorded that a patient information leaflet was provided.

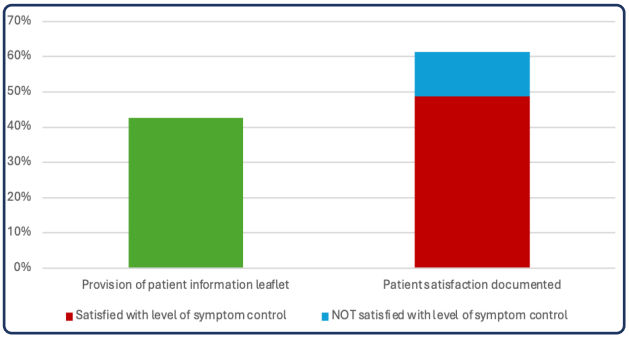

Figure 6. Bar chart showing the percentage of 'yes' responses to having recorded ai) documentation of patient satisfaction aii) that the patient was satisfied with the level of symptom control b) provision of a patient information leaflet.

Treatments for BP

A wide range of treatments were recorded to treat BP (Table 1 overleaf) in cases. Clobetasol propionate was the most commonly used topical treatment (74.9% of cases), oral prednisolone was used in 90.9% of cases and doxycycline was used in 83.8% of cases. Mycophenolate (13.3% of cases) was the most commonly used disease modifying agent (DMARD), in contrast to the 2018 audit where azathioprine was the most commonly used DMARD.

Patients were either commenced on systemic medication at first presentation or during subsequent follow-up appointments. A total of 440 patients (97.8%) were commenced on some form of systemic treatment, of which 305 (75.0%) were treated with two or more systemic therapies during the 12-month assessment period, 108 (24.5%) with corticosteroids alone, 15 (3.4%) with a disease-modifying agent alone (significantly higher than the 2018 audit findings [0.6%, p=0.004]) and 75 (16.8%) with an anti-inflammatory antibiotic or alternative systemic treatment alone (significantly higher than the 2018 audit findings [8.8%, p<0.001]) (Figure 7).

Conclusion

Overall, compliance with documentation standards was moderate to low, while adherence to standards related to

Category	Medications	Percentage of patients receiving specific treatment	
		2018 audit	2024 audit
Topicals (Creams, Ointments, etc.)	Clobetasol propionate	66.8%	74.9%
	Betamethasone valerate	7%	4.4%
	Mometasone furoate	7%	7.1%
	Fusidic acid + betamethasone	3.6%	2.9%
	Clotrimazole + betamethasone	1.0%	0.4%
	Clobetasone butyrate	0	3.8%
	Hydrocortisone	0	1.8%
Oral/Systemic Steroids	Prednisolone	84.9%	90.9%
Antibiotics	Doxycycline	50.7%	83.8%
	Lymecycline	7.6%	6.4%
	Minocycline	3.4%	1.1%
	Erythromycin	0.2%	1.8%
	Oxytetracycline	1.0%	0.4%
Immunosuppressants	Methotrexate	3.1%	8.0%
	Azathioprine	11.2%	8.4%
	Mycophenolate	11.1%	13.3%
	Intravenous immunoglobulin	0%	0.2%
	Rituximab	0%	0.7%
Vitamins	Nicotinamide	4.0%	11.8%
	Niacinamide	2.6%	1.1%

Table 1. Table showing all recorded treatments to treat BP in cases. 2018 audit data compared with 2024 audit data.

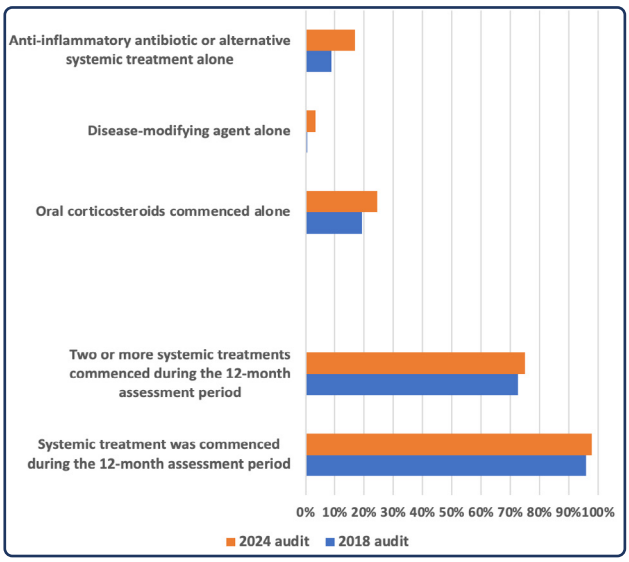

Figure 7. Bar chart demonstrating systemic treatments used in BP cases.

direct patient care was high. Recommendations for future practice are outlined below. We welcome feedback from members regarding the observed differences in case severity compared to the 2018 audit, as well as any changes in diagnostic and treatment practices.

References

Venning VA, Taghipour K, Mohd Mustapa MF, Highet AS, Kirtschig G. British Association of Dermatologists' guidelines for the management of bullous pemphigoid 2012. Br J Dermatol 2012;167(6):1200-14.

Smith H, Mohd Mustapa MF, Cheung ST, de Berker DAR. National audit on the management of bullous pemphigoid. Clinical and Experimental Dermatology 2020;45(3):289-94.

Please keep a look out on an advert for vacancies on the National Audit sub-committee https://www.bad.org.uk/about-the-bad/bad-elections/.

Recommendations for future practice

- Record blister count as a measure of disease severity to help track treatment response.
- Consider using standardised proformas to assist with recording key BP patient care standards.
- Advise patients to follow the MHRA's labelling of topical steroid potencies to ensure correct selection and simplify guidance for those using multiple steroid products of varying strengths.
- Inform patients of the potential side effects of long-term oral steroid use and provide guidance to mitigate the risk of complications.

Questions for members

- What are the reasons behind the shift from direct immunofluorescence to the more frequent use of indirect immunofluorescence for diagnosing BP since the 2018 audit?
- This audit shows that cases were more severe than those in the 2018 audit. What could be the underlying causes of this trend?
- Why are documentation rates for osteoporosis risk low in BP cases?
- Why are disease-modifying treatments (DMARDs) being used more frequently as monotherapy in this audit compared to the 2018 audit?