Changing presentations of scarlet fever in general practice

Ana Correa12, Theresa Lamagni3, Ivelina Yonova12, Sameera Pathirannehelage12, Sam O’Sullivan12, Simon de Lusignan12
1 Department of Clinical and Experimental Medine, University of Surrey
2 Royal College of General Practitioners Research and Surveillance Centre
3 Public Health England

Aim
The aim of this research is to highlight changes in consultation rates and demographic characteristics of patients diagnosed with scarlet fever in recent years. Concerns have been expressed that the condition might be harder to identify in different ethnic groups.

Relevance
GPs and primary care teams should be aware of the rising trend in presentations of scarlet fever in order to provide early detection, treatment and advice, as needed. Prompt notification will also assist local health protection teams in managing outbreaks.

Assessing consultation patterns according to patient characteristics can help GPs to identify at-risk groups, and to differentiate scarlet fever, which should be treated with antibiotics, from viral rashes.

Methods
We used the data gathered in the RCGP RSC weekly report on communicable and respiratory diseases [1], covering a population of 962,302 in England.

Out of the scarlet fever cases in children under 10 (n=337), we assessed the ethnicity distribution, using recorded data and an ethnicity-identifying algorithm [2], compared with the same age population. Significance was tested using Chi-square.

Results
In 2014 and 2015, there were a total of 56.70 and 52.90 cases of scarlet fever per 100,000 population, respectively, compared to 22.06 cases in 2012 and 21.95 cases in 2013 (these are clinical diagnoses).

Patients of a non-white ethnicities tended to have lower rates of diagnosis than those of white ethnicity, but this was not significant (Table 1).

Key findings
• The incidence of scarlet fever increased from 21.95 per 100,000 in 2013 to 52.90 in 2015.
• People of a non-white ethnicity had lower rates of diagnosis than people of a white ethnicity – these results were not statistically significant.

Conclusion
Assessment of GP data can provide important information on management of scarlet fever during this period of elevated incidence [3]. Whilst our data are not conclusive, they may suggest significant under-diagnosis in patients with more darkly pigmented skin in whom the rash may be less apparent.

Further assessment of GP data, combined with secondary care data can provide important insights into the impact of the current upsurge in scarlet fever, in particular the incidence of complications.

Acknowledgements
We would like to thank our member practices and their patients.

References