

Influenza and pneumococcal vaccination promotion and uptake amongst patients with ANCA associated vasculitis: a Quality Improvement Project

Dr Zhia Ning Lim¹, Sarah Logan¹, Dr Ellen Kay¹, Dr Joshua Caplan¹, Dr Raheej Khan¹, Dr Matthew Morgan^{1,2}, Professor Lorraine Harper^{1,2}, Dr Dimitrios Chanouzas^{1,2}

¹University Hospitals Birmingham NHS Trust, Birmingham, United Kingdom, ²University of Birmingham, Birmingham, United Kingdom

Introduction

Infection is the leading cause of death amongst patients with ANCA-associated vasculitis (AAV). Immunisation against influenza and pneumococcus is strongly recommended for patients with AAV. The national target for influenza immunisation uptake set by the World Health Organisation is to achieve at least 55% coverage for those who are aged under 65 and 'at risk', and 75% for those aged over 65. We aimed to evaluate the uptake of influenza and pneumococcus vaccination amongst patients with AAV over a period of 3 years in a large tertiary referral vasculitis centre.

Methods

Data on influenza and pneumococcus vaccination uptake were collected by sending letters to GP practices at the end of two influenza seasons. The first round of data collection evaluated influenza and pneumococcal vaccination uptake over the 2015 influenza season. A questionnaire was then distributed to 80 patients with AAV to understand patient views on vaccination uptake. Patient education days were organised to promote vaccination uptake. The second round of data collection measured influenza and pneumococcal vaccination uptake over the 2018 influenza season.

Results

Data were collected from 93 patients for the 2015 influenza season. Influenza vaccination uptake was 62% (58/93). 58% of AAV patients under the age of 65 (25/43) and 66% of patients over 65 (33/50) received the influenza vaccine. 40% of patients (37/93) had received the pneumococcal vaccine at some point in the past, whilst 39% (36/93) had received it within the last 5 years.

80 AAV patients were invited to complete a questionnaire aiming to elucidate reasons for uptake or refusal of vaccination. Influenza vaccination uptake amongst the questionnaire respondents was a little higher compared to the 2015 season respondents (71% versus 62%). We found that patients who refused to have vaccinations had misconceptions regarding vaccination or felt it was unnecessary for them to have the vaccine. 58% of respondents wished to have more information. 20% of patients that wished to have more information had never received the influenza vaccination. Out of the 17 patients that had never received the influenza vaccination, 53% (9/17) wished to have further information. Patient education days were organised and delivered with an emphasis on promoting vaccine awareness.

Data were subsequently collected from 237 patients for the 2018 influenza season. Influenza vaccination uptake was 60% (143/237). 57% of under 65s and 62% of over 65s had received the influenza vaccine during the 2018 season. 41% of patients had received the pneumococcal vaccination within the last 5 years, however the proportion of patients that had received the pneumococcal vaccination at some point in the past increased to 78% compared to 40% during the 2015 data collection.

Conclusion

Despite the high mortality risk associated with infection amongst AAV patients, vaccination uptake rates remain suboptimal. Provision of information in the form of education days may have been associated with an increase in pneumococcal vaccination uptake, however the rate of influenza vaccination uptake remained unchanged. Our findings suggest that a broader approach is needed to encourage uptake of vaccination in this vulnerable population.