

Review Article

Meningococcal Disease in Northern Ireland - Past, Present & Future

MeningoNI Forum

Millar BC^{1,2}, Banks L³, Bourke TW⁴, Cunningham M⁵, Dooley JSG², Elshibly S⁶, Goldsmith CE¹, Fairley D⁷, Jackson K^{4,8}, Lamont S⁴, Jessop L⁹, McCrudden E⁴, McConnell D¹⁰, McAuley K¹⁰, McKenna JP⁷, Moore PJA⁸, Smithson R⁹, Stirling J¹, Shields M^{4,8} & Moore JE^{1,2,8*}

Provenance: externally peer reviewed

Accepted: 5th March 2018

ABSTRACT

Meningococcal disease has had devastating consequences in Northern Ireland since its first description locally in 1859. The incidence of this disease has significantly declined in recent years, however it is important to understand reasons for this changing epidemiology and to acknowledge the diagnostic and clinical management developments that have been made locally. This review aims to examine the changing face of this disease in Northern Ireland over the years, with particular reference to local disease prevention, epidemiology, diagnosis, clinical treatment and management, post-disease sequelae and the role of meningitis charities locally, in terms of patient support and research.

BACKGROUND

In 2014, a forum named “*MeningoNI*” was established to bring together stakeholders with a professional interest in meningococcal disease in Northern Ireland. *MeningoNI* offers a forum for education and discussion of matters with a broad interest in meningococcal disease, allowing key local stakeholders, the opportunity to consider recently evolving meningococcal disease in the context of detection and characterisation, microbial pathogenesis, epidemiology, disease prevention and vaccinology. Specific objectives of the Forum are:-

- To create a local (NI) Forum and meeting place for key stakeholders to consider evolving issues in meningococcal disease,
- To independently consider existing and emerging scientific evidence relating to disease management,
- To consider the advice of expert National Committees in a devolved NI context,
- To consider the jurisdictional aspects of meningococcal disease detection and management on the Island of Ireland, given that NI is the only region of the UK to share a land border with another EU member State (Republic of Ireland),
- To issue independent advice/guidance as an expert forum on the strategic development of health systems in NI relating to

meningococcal disease management/prevention, including charting a roadmap for optimum patient outcome in NI,

- To examine policy relating to meningococcal disease control, including meningococcal disease, between NI/within the devolved nations of the UK, as well as with our neighbouring EU member State and to explore models of synergy and collaboration with these nations, to minimise the burden of meningococcal disease for all.

The Forum has met on numerous occasions and has involved key speakers from within and outside NI, including Professor Andrew Pollard, Chair, UK Joint Committee on Vaccination & Immunisation (JCVI), Professor Karina Butler, Chair, National Immunisation Advisory Committee, Dublin, as well as local MLAs, Stormont Health Committee, NI MPs and Dr Michael McBride, NI Chief Medical Officer.

This review represents one output from this Forum and the authors trust that this will add value to those readers with an interest in meningococcal disease, locally, nationally and internationally. All authors are members of the Northern Ireland Meningococcal Stakeholders’ Forum (MeningoNI).

ACKNOWLEDGEMENT

The authors wish to thank Ms. Sinéad McMurray, Information and Support Officer, Meningitis Research Foundation, for her editorial comments. *MeningoNI* has been supported by an unrestricted educational grant provided by Novartis Vaccines.

¹Department of Bacteriology, Belfast City Hospital, Lisburn Road, Belfast, BT9 7AD, ²School of Biomedical Science, Ulster University, Cromore Road, Coleraine, BT52 1SA, ³Meningitis Now, Stroud, Gloucestershire GL5 3TJ, ⁴The Royal Belfast Hospital for Sick Children, Belfast, BT12 6BE, ⁵University Health Centre at Queen’s, 7 University Terrace, Belfast, BT7 1NP, ⁶Department of Microbiology, Antrim Area Hospital, Antrim, BT41 2RL, ⁷Department of Medical Microbiology, The Royal Group of Hospitals, Belfast, BT12 6BA, ⁸School of Medicine, Dentistry and Biomedical Sciences, Queen’s University, University Road, Belfast, BT7 1NN, ⁹Northern Ireland Public Health Agency, Belfast, BT2 8BS, ¹⁰Meningitis Research Foundation, 71 Botanic Avenue, Belfast, BT7 1JL.

Correspondence to Professor John E. Moore

Northern Ireland Public Health Laboratory, Department of Bacteriology, Belfast City Hospital, Lisburn Road, Belfast, BT9 7AD,

j.moore@qub.ac.uk

