

# Tonsillectomy compared with conservative management in patients over 16 years with recurrent sore throat: the NATTINA RCT and economic evaluation

Janet A Wilson,<sup>1\*</sup> Tony Fouweather,<sup>1</sup>  
Deborah D Stocken,<sup>2</sup> Tara Homer,<sup>1</sup>  
Catherine Houghton,<sup>3</sup> Nikki Rousseau,<sup>2</sup>  
James O'Hara,<sup>4</sup> Luke Vale,<sup>1</sup>  
Rebecca Wilson,<sup>5</sup> Sonya Carnell,<sup>5</sup>  
Scott Wilkes,<sup>6</sup> Jill Morrison,<sup>7</sup> Kim Ah-See,<sup>8</sup>  
Sean Carrie,<sup>4</sup> Claire Hopkins,<sup>9</sup> Nicola Howe,<sup>5</sup>  
Musheer Hussain,<sup>10</sup> Lyndsay Lindley,<sup>11</sup>  
Kenneth MacKenzie,<sup>12</sup> Lorraine McSweeney,<sup>1</sup>  
Hisham Mehanna,<sup>13</sup> Christopher Raine,<sup>14</sup>  
Ruby Smith Whelan,<sup>5</sup> Frank Sullivan,<sup>15</sup>  
Alexander von Wilamowitz-Moellendorff<sup>5</sup> and  
Dawn Teare<sup>1</sup>

<sup>1</sup>Population Health Sciences Institute, Newcastle University, Newcastle upon Tyne, UK

<sup>2</sup>Leeds Institute of Clinical Trials Research, University of Leeds, Leeds, UK

<sup>3</sup>Department of Social Work, Education and Community Wellbeing, Northumbria University, Newcastle upon Tyne, UK

<sup>4</sup>Ear, Nose and Throat Department, Newcastle Upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK

<sup>5</sup>Newcastle Clinical Trials Unit, Newcastle University, Newcastle upon Tyne, UK

<sup>6</sup>School of Medicine, Faculty of Health Sciences and Wellbeing, University of Sunderland, Sunderland, UK

<sup>7</sup>Senate Office, University of Glasgow, Glasgow, UK

<sup>8</sup>Department of Otolaryngology Head and Neck Surgery, NHS Grampian, Aberdeen, UK

<sup>9</sup>Ear, Nose and Throat and Head and Neck Department, Guy's and St Thomas' NHS Foundation Trust, London, UK

<sup>10</sup>School of Medicine, University of Dundee, Dundee, UK

<sup>11</sup>Social Policy Research Unit, University of York, York, UK

<sup>12</sup>Department of Ear, Nose and Throat Surgery, NHS Greater Glasgow and Clyde, Glasgow, UK

<sup>13</sup>Institute of Head and Neck Studies and Education, University of Birmingham, Birmingham, UK

<sup>14</sup>Ear, Nose and Throat Department, Bradford Teaching Hospitals NHS Foundation Trust, Bradford, UK

<sup>15</sup>Population and Behavioural Science Division, School of Medicine, University of St Andrews, St Andrews, UK

\*Corresponding author [janet.wilson@newcastle.ac.uk](mailto:janet.wilson@newcastle.ac.uk)

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**Full disclosure of interests:** Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at <https://doi.org/10.3310/YKUR3660>.

**Primary conflicts of interest:** Catherine Haighton reports being a member of the College of Experts National Institute for Health and Care Research (NIHR) call for COVID Recovery and Learning Research (2020–present), the NIHR Programme Grants for Applied Research Sub Committee (2019–present) and the NIHR Research for Patient Benefit Programme North East Regional Funding Committee (2010–14). Luke Vale reports being a member of the NIHR Health Technology Assessment (HTA) Programme Clinical Trials and Evaluation Panel (2015–18). Musheer Hussain reports that he was chairperson of the most recent Scottish Intercollegiate Guidelines Network guideline on ‘Management of sore throat and indications for Tonsillectomy’ (2010) and chairperson of the Scottish Otolaryngology Society (ENT-Scotland) committee on ‘Should Reusable equipment for Tonsillectomy be abandoned?’ (2014). Hisham Mehanna reports personal fees from Merck Sharp & Dohme Corporation (Kenilworth, NJ, USA), Sanofi Pasteur (Lyon, France) and Merck (Darmstadt, Germany); grants from GlaxoSmithKline Biologicals (Brentford, UK), AstraZeneca (Cambridge, UK) and GSK PLC; directorship and employment from Warwickshire Head Neck Clinic Ltd; and travel and accommodation expenses from MSD, outside the submitted work. Professor Mehanna also reports being a member of the HTA Technology Assessment Clinical Evaluation and Trials Board (2013–18) and a member of the HTA Unit Interventional Technologies Panel (2009–18). Frank Sullivan reports being a member of the Efficacy and Mechanism Evaluation (EME) Strategy Advisory Committee (2018–19), the EME Funding Committee (2016–19) and the EME Funding Committee Sub-group Remit and Comp Check (2018–19).

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## Plain language summary

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## Plain language summary

**T**onsillectomy is an operation to take out the pair of tonsil glands at the back of the throat. It is an option for adults who suffer from repeated, severe sore throats. Adults who have a tonsillectomy say that they get fewer sore throats afterwards, but it is not clear whether or not they would have got better over time without the operation. There is pressure on doctors to limit the number of tonsillectomies carried out. At the same time, emergency hospital admissions for adults with severe throat infections have been increasing. NAtional Trial of Tonsillectomy IN Adults aimed to find out whether tonsillectomy is an effective and worthwhile treatment for repeated severe sore throats or whether patients would be better off treated without an operation.

A total of 453 patients from 27 hospitals in Great Britain took part in the study. Patients were assigned at random to receive either tonsillectomy or conservative management (treatment as needed from their general practitioner). We measured how many sore throats patients had in the next 2 years by sending them text messages every week. We asked about the impact of their sore throats on their quality of life and time off work, and looked at the costs of treatment. We also interviewed 47 patients, general practitioners and hospital staff about their experiences of tonsillectomy and NAtional Trial of Tonsillectomy IN Adults. The typical patient in the tonsillectomy arm had 23 days of sore throat compared with 30 days of sore throat in the conservative management arm. Tonsillectomy resulted in higher quality of life. We looked to see whether or not it was only those with the most severe sore throats who benefited from tonsillectomy, but we found that patients with more or less severe sore throats at the start all did better with tonsillectomy. Patients who had a tonsillectomy were happy to have undertaken this. Our findings suggest a clear benefit of tonsillectomy using modest additional NHS resources for adults with repeated severe sore throats.



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