

A prospective study of the incidence of myasthenia gravis in the East Midlands of England

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Supplementary data

Geographical study region population

References:

<http://www.ons.gov.uk/ons/guide-method/census/2011/index.html>

https://observatory.derbyshire.gov.uk/IAS/Custom/resources/census/atlas/atlas_2011/atlas_2011_Full_document_v1.0.pdf

<http://www.nottinghamshire.gov.uk/business-community/economic-data/census-2011/census-2011-second-release-december-2012-to-february-2013>

Derbyshire 2011 census figures

769,700 people (378,800 (49.21%) male) (143,000 >65yrs (64,181 males); 301,200 >50yrs (145,181 males) (need to exclude: Chesterfield 103,788 [50,900, 49% males; 19,291 >65yrs]; High Peak 90,892 [44,774, 49.3% males; 15,669 >65yrs]; North East Derbyshire 99,023 [48,564, 49% males; 20,918 >65yrs]). After exclusion = 475,997 people (234,562 (49.28%) males) (87,122 >65 yrs (39,102 males).

Derby City 2011 census figures

248,752 people (123,132 (49.5%) male) (37,313 >65yrs (16,418 males); 77,113 >50yrs (36,318 males))

Nottinghamshire 2011 census

785,802 people (49.22% male) (142,447 >65yrs) (need to exclude: Bassetlaw 112,863 (20,941 >65yrs) (49.64% male)). After exclusion = 672,939 people (330,747 (49.15%) male) (121,506 >65yrs (54,346 males); 255,255 >50yrs (120,850 males)).

Nottingham City 2011 census

305,680 people (153,777 (50.3%) male) (35,552 >65yrs (15,400 males); 77,354 >50yrs (36,867 males))

Overall figures

Nottingham/Nottinghamshire population	978619	(49.5% male)
Derby/ Derbyshire population	724749	(49.35% male)

Total study population	1,703,368	(49.44% male (842,145))
Total study population aged <50 years	1,101,877	(50.85% male (560,344))
Total study population aged >50 years	601,491	(47.59% male (286,250))
Total study population aged >65 years	281,493	(44.5% male (125,264))

Incidence figures

01 August 2014 – 31 July 2015:

30 patients (16 males, 14 females) (5 <50yrs [0 male]; 25 >50yrs [16 male]; 13 >65yrs [9 male])

Incidence 17.61 (95% CI 10.69 - 28.59) per million (incidence <50yrs = 4.53; incidence >50yrs = 41.56; incidence >65yrs = 46.18).

01 August 2015 – 31 July 2016:

28 patients (18 males, 10 females) (7 <50yrs [4 male]; 21 >50yrs [14 male]; 13 >65yrs [7 male]).

Incidence 16.43 (95% CI 9.79 - 27.14) per million (incidence <50yrs = 6.35; incidence >50yrs = 34.91; incidence >65yrs = 46.18).

01 August 2016 – 31 July 2017:

32 patients (18 males, 14 females) (8 <50yrs [3 male]; 24 >50yrs [15 male]; 16 >65yrs [10 male]).

Incidence 18.79 (95% CI 11.61 - 30.03) per million (incidence <50yrs = 7.26; incidence >50yrs = 39.9; incidence >65yrs = 56.84).

01 August 2017 – 31 July 2018:

30 patients (16 males, 14 females) (6 <50yrs [2 male]; 24 >50yrs [14 male]; 16 >65yrs [7 male])

Incidence 17.61 (95% CI 10.69 - 28.59) per million (incidence <50yrs = 5.45; incidence >50yrs = 39.9; incidence >65yrs = 56.84).

Overall incidence 01 August 2014 – 31 July 2018:

120 patients (69 males, 51 females) (26 <50yrs [9 male]; 94 >50yrs [59 male]; 58 >65yrs [33 male]).

Incidence 17.61 (95% CI 16.08 – 19.14) per million per year (males incidence = 20.48 (95% CI 18.68 – 22.29); females incidence = 14.8 (95% CI 11.31 – 18.3); incidence <50yrs = 5.9 (95% CI 4.03 – 7.76); incidence >50yrs = 39.9 (95% CI 34.48 – 43.65); incidence >65yrs = 56.84 (95% CI 49.72 – 61.3)).

Details of patients referred to the specialist myasthenia clinic, but not thought to have myasthenia after clinical examination, investigation and follow-up assessments.

19 patients (10 females, 9 males)

4 diplopia, unknown cause (2 males, 2 females)

3 ptosis, unknown cause (1 male, 2 females)

2 Guillain-Barre syndrome (1 male, 1 female)*

2 mitochondrial CPEO (1 male, 1 female)

2 latent strabismus (1 male, 1 female)

1 oculopharyngeal muscular dystrophy (1 male)*

1 dysphagia, unknown cause (1 female)

1 ankylosing spondylitis, spondyloarthropathy (1 male)*

1 chronic fatigue syndrome (1 male)

1 functional neurological symptoms (1 female)*

1 inclusion body myositis (1 female)

*Patients had low-level acetylcholine receptor antibodies by radioimmunoprecipitation assay, but were negative for clustered acetylcholine receptor antibodies by live cell-based assay.