*Epidemiology and Infection*

**Epidemiology and bacterial characteristics of invasive group B streptococcus disease: A population-based study in Japan in 2010–2020**

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Supplementary Materials

**Supplementary Table S1. Yearly changes in the types of invasive GBS disease in patients aged <1 year**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Number of cases | Incidence rate per 1,000 live births | EOD(incidence rate per 1,000 live births) | LOD(incidence rate per 1,000 live births) | LLOD(incidence rate per 1,000 live births) | Unknown |
|
| 2010 | 13 | 0.25 | 3 (0.06) | 7 (0.14) | 2 (0.04) | 1 |
| 2011 | 11 | 0.21 | 2 (0.04) | 5 (0.10) | 1 (0.02) | 3 |
| 2012 | 8 | 0.16 | 0 (0.00) | 7 (0.14) | 0 (0.00) | 1 |
| 2013 | 8 | 0.17 | 2 (0.04) | 6 (0.13) | 0 (0.00) | 0 |
| 2014 | 17 | 0.36 | 3 (0.06) | 10 (0.21) | 4 (0.08) | 0 |
| 2015 | 7\* | 0.15 | 2 (0.04) | 4\* (0.08) | 1 (0.02) | 0 |
| 2016 | 13\* | 0.28 | 3 (0.06) | 9\* (0.19) | 1 (0.02) | 0 |
| 2017 | 14 | 0.31 | 4 (0.09) | 9 (0.20) | 1 (0.02) | 0 |
| 2018 | 9\* | 0.20 | 1 (0.02) | 8\* (0.18) | 0 (0.00) | 0 |
| 2019 | 13\* | 0.30 | 2 (0.04) | 11\* (0.25) | 0 (0.00) | 0 |
| 2020 | 11 | 0.26 | 1 (0.04) | 10 (0.24) | 0 (0.00) | 0 |
| Total | 124 |  | 23 | 86 | 10 | 5 |

EOD, early-onset disease; LOD, late-onset disease; LLOD, late late-onset disease

\*Recurrent cases were counted twice.

**Supplementary Table S2. Background information of patients with invasive GBS disease aged <1 year (n=120)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Total (%) | EOD | LOD | LLOD | Unknown |
| Birth body weight | <1000 g1000–1499 g1500–2499 g≥2500 gUnknown | 9 (7.5)3 (2.5)19 (15.8)77 (64.2)12 (10.0) | 115162 | 5113585 | 21232 | 10103 |
| Gestational age | <28 weeks28–36 weeks37–41 weeksUnknown | 11 (9.2)16 (13.3)81 (67.5)12 (10.0) | 23162 | 511606 | 3151 | 1103 |
| Underlying disease | YesNoUnknown | 40 (33.3)74 (61.7)6 (5.0) | 6152 | 19553 | 541 | 500 |
| Clinical diagnoses\* | BacteraemiaMeningitisPneumoniaOthers | 54 (43.5)56 (45.2)9 (7.26)5 (4.2) | 81050 | 414104 | 4501 | 1040 |

EOD, early-onset disease; LOD, late-onset disease; LLOD, late late-onset disease

\*Recurrent cases were counted twice.

**Supplementary Table S3. Maternal information of patients with invasive GBS disease aged <1 year (n=120)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Total (%) | EOD | LOD | LLOD | Unknown |
| Mode of delivery  |  |  |  |  |  |  |
|  | Caesarean section | 26 (21.7) | 2 | 20 | 4 | 0 |
|  | Vaginal delivery | 72 (60.0) | 19 | 50 | 3 | 0 |
|  | Unknown | 22 (18.3) | 2 | 12 | 3 | 5 |
| Maternal colonisation |  |  |  |  |  |  |
|  | Negative | 57 (47.5) | 17 | 36 | 4 | 0 |
|  | Positive | 17 (14.2) | 1 | 16 | 0 | 0 |
|  | Untested | 10 (8.3) | 2 | 7 | 1 | 0 |
|  | Unknown | 36 (30.0) | 3 | 23 | 5 | 5 |
| Prophylaxis of antimicrobials |  |  |  |  |  |  |
|  | Yes | 21 (17.5) | 2 | 19 | 1 | 0 |
|  | No | 63 (52.5) | 19 | 38 | 6 | 0 |
|  | Unknown | 36 (30.0) | 2 | 26 | 3 | 5 |
| Nutrition for infants |  |  |  |  |  |  |
|  | Breast milk | 18 (15.0) | 1 | 16 | 1 | 0 |
|  | Formula milk | 22 (18.3) | 3 | 18 | 1 | 0 |
|  | Mix | 45 (37.5) | 7 | 33 | 5 | 0 |
|  | Before the start of nutrition | 8 (6.7) | 7 | 1 | 0 | 0 |
|  | Breast milk and weaning food | 1 (0.8) | 0 | 0 | 1 | 0 |
|  | Unknown | 26 (21.7) | 5 | 13 | 3 | 5 |

EOD, early-onset disease; LOD, late-onset disease; LLOD, late late-onset disease