Causes of Vertigo in Thailand

Suwicha Isaradisaikul, MD; Niramon Navacharoen, MD; Charuk Hanprasertpong, MD; Jaran Kangsanarak, MD; Rapeepun Panyathong, BNS.

Department of Otolaryngology, Faculty of Medicine, Chiang Mai University

Abstract

Objective: To review causes and identify time-course of vertigo in ear, nose, and throat clinic, and to serve as a reference for other clinics.

Study Design & Setting: Retrospective chart review in a tertiary care, university hospital.

Subjects and Methods: Patients whose ICD-10 data showed vertigo between April 2005 and December 2007 were extracted from the database. Main diagnosis causing vertigo in each visit, characteristics, time-course of vertigo, and patient demographic data were recorded.

Results: Of 574 cases, 17 different diagnoses had been made. Diagnosed categories were peripheral vertigo 72.9%, central vertigo 0.8%, psychogenic vertigo 0.2%, and adexitis 26.1%. Common causes of vertigo were benign paroxysmal positional vertigo 22.5%, Meniere’s disease 14.6%, and drug-induced hearing loss 0.8%. Less common causes were delayed endolymphatic hydrops, Ramsey Hunt syndrome, otosyphilis, vestibular neuritis, temporal bone fracture, post-streptococcal vertigo, and psychogenic vertigo. Ninety-nine cases who returned for follow-up had remitted symptoms within 4 weeks.

Discussion

Diagnosis of vertigo is based mainly on a complete history and neurotologic examinations. Major categories of vertigo are peripheral vertigo, central vertigo, psychogenic vertigo, and undiagnosed cause. In our study, the three most common causes were benign paroxysmal positional vertigo (52.5%), Meniere’s disease (14.6%), and sudden idiopathic hearing loss (2.9%). Less common causes were labyrinthitis 0.7%, gensenic vertigo 0.4%, and acoustic neuroma 0.3%. Rare conditions included benign paroxysmal positional vertigo in childhood 0.7%, labyrinthitis 0.7%, and acoustic neuroma 0.3%. Rare conditions included delayed endolymphatic hydrops, Ramsay Hunt syndrome, transplantation-associated hearing loss, temporal bone fracture, central vertigo, and psychogenic vertigo. Ninety-nine cases who returned for follow-up had remitted symptoms within 4 weeks.

conclusions

The advantages of a retrospective review are clearer evidence and more comparable results. The study showed that patients with vertigo who return for follow-up had remitted symptoms within 4 weeks.

Acknowledgements

Grant support for this project was provided by the Faculty of Medicine, Chiang Mai University.

References


9. Suwicha Isaradisaikul, MD; Niramon Navacharoen, MD; Charuk Hanprasertpong, MD; Jaran Kangsanarak, MD; Rapeepun Panyathong, BNS. Department of Otolaryngology, Faculty of Medicine, Chiang Mai University.

Results

Medical records of 1,445 cases (2,759 visits) extracted from the hospital’s database were retrospectively reviewed. Of 894 cases (1,605 visits) with vertigo, 597 cases with complete medical records were analyzed. One hundred fifty-four cases (27.8%) were men and 395 cases (72.2%) were women. Mean to woman ratio was 1:2.6. Age at presentation ranged from 8 to 89 years, with a mean of 49 years. Average age of men and women were 52.9 years and 47.1 years, respectively. Sex was significantly higher than that of women (W94:1) and men (W94:1) at 1:5.5. Distribution of age and sex by decade is shown in Figure 1. Diagnostic categories of vertigo are shown in Figure 2 and Table 1. Seventeen diagnoses are shown in Table 2.

Discussion

Tables 1 and 2 show epidemiologic studies and causes of vertigo in Thailand.

In the ENT clinic, peripheral vestibular disorders is the main diagnostic category (72.9%), as in other studies in Thailand (60.4-82.2%) and in Europe and North America (57-85%). Percentage of certain diagnosis in this study was 27.9% (404 of 1,445 cases), which is close to a study by Katsarkus in Montreal, Canada (79.4%). Age at presentation is similar to reports from Canada (50 years). Sex ratio is significantly higher than that of women (W94:1) and men (W94:1) at 1:2.6. Central vestibular disorders were diagnosed in 9 cases (0.6%), which are extremely small compared to other studies (7-13.7%). Ven available vestibular signs symptoms in patients with central vertigo was possibly due to ignorance of vertigo history. Many clinicians are not experienced with peripheral vestibular signs symptoms were missed by both otorhinolaryngologists and neurologists reported a higher percentage of central vertigo than our study.

Table 2 shows epidemiologic studies and causes of vertigo in Thailand.

The advantages of a retrospective review are clearer evidence and more comparable results. Tracking the diagnosis using ICD-10 codes is an effective way to validate a diagnosis of vertigo and reduce a broad variety of reported causes.

Central vestibular disorders were diagnosed in 4 cases (0.8%), which are extremely small compared to other studies (7-13.7%). Ven available vestibular signs symptoms in patients with central vertigo was possibly due to ignorance of vertigo history. Many clinicians are not experienced with peripheral vestibular signs symptoms were missed by both otorhinolaryngologists and neurologists reported a higher percentage of central vertigo than our study.

In the ENT clinic, peripheral vestibular disorders is the main diagnostic category (72.9%), as in other studies in Thailand (60.4-82.2%) and in Europe and North America (57-85%). Percentage of certain diagnosis in this study was 27.9% (404 of 1,445 cases), which is close to a study by Katsarkus in Montreal, Canada (79.4%). Age at presentation is similar to reports from Canada (50 years). Sex ratio is significantly higher than that of women (W94:1) and men (W94:1) at 1:2.6. Central vestibular disorders were diagnosed in 9 cases (0.6%), which are extremely small compared to other studies (7-13.7%). Ven available vestibular signs symptoms in patients with central vertigo was possibly due to ignorance of vertigo history. Many clinicians are not experienced with peripheral vestibular signs symptoms were missed by both otorhinolaryngologists and neurologists reported a higher percentage of central vertigo than our study.

Table 2: Causes of vertigo

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benign paroxysmal positional vertigo</td>
<td>52.5%</td>
</tr>
<tr>
<td>Meniere’s disease</td>
<td>14.6%</td>
</tr>
<tr>
<td>Sudden idiopathic hearing loss</td>
<td>2.9%</td>
</tr>
<tr>
<td>Labyrinthitis</td>
<td>0.7%</td>
</tr>
<tr>
<td>Gansenic vertigo</td>
<td>0.7%</td>
</tr>
<tr>
<td>Acoustic neuroma</td>
<td>0.3%</td>
</tr>
<tr>
<td>Delayed endolymphatic hydrops</td>
<td>0.8%</td>
</tr>
<tr>
<td>Ramsay Hunt syndrome</td>
<td>0.2%</td>
</tr>
<tr>
<td>Otosyphilis</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

In the ENT clinic, peripheral vestibular disorders is the main diagnostic category (72.9%), as in other studies in Thailand (60.4-82.2%) and in Europe and North America (57-85%). Percentage of certain diagnosis in this study was 27.9% (404 of 1,445 cases), which is close to a study by Katsarkus in Montreal, Canada (79.4%). Age at presentation is similar to reports from Canada (50 years). Sex ratio is significantly higher than that of women (W94:1) and men (W94:1) at 1:2.6. Central vestibular disorders were diagnosed in 9 cases (0.6%), which are extremely small compared to other studies (7-13.7%). Ven available vestibular signs symptoms in patients with central vertigo was possibly due to ignorance of vertigo history. Many clinicians are not experienced with peripheral vestibular signs symptoms were missed by both otorhinolaryngologists and neurologists reported a higher percentage of central vertigo than our study.

The advantages of a retrospective review are clearer evidence and more comparable results. Tracking the diagnosis using ICD-10 codes is an effective way to validate a diagnosis of vertigo and reduce a broad variety of reported causes.

Central vestibular disorders were diagnosed in 4 cases (0.8%), which are extremely small compared to other studies (7-13.7%). Ven available vestibular signs symptoms in patients with central vertigo was possibly due to ignorance of vertigo history. Many clinicians are not experienced with peripheral vestibular signs symptoms were missed by both otorhinolaryngologists and neurologists reported a higher percentage of central vertigo than our study.

Table 2 shows epidemiologic studies and causes of vertigo in Thailand.

The advantages of a retrospective review are clearer evidence and more comparable results. Tracking the diagnosis using ICD-10 codes is an effective way to validate a diagnosis of vertigo and reduce a broad variety of reported causes.

Central vestibular disorders were diagnosed in 4 cases (0.8%), which are extremely small compared to other studies (7-13.7%). Ven available vestibular signs symptoms in patients with central vertigo was possibly due to ignorance of vertigo history. Many clinicians are not experienced with peripheral vestibular signs symptoms were missed by both otorhinolaryngologists and neurologists reported a higher percentage of central vertigo than our study.

Acknowledgements

Grant support for this project was provided by the Faculty of Medicine, Chiang Mai University.