Epilepsy Research Network

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Division of Neurology
Science Café, 13 September 2017
A historical lesson: From past to present
- Sagrada Familia (Barcelona)
### Table 8: Awareness, attitudes and understanding towards epilepsy in Asia

<table>
<thead>
<tr>
<th>Reference</th>
<th>Year</th>
<th>N</th>
<th>Proportion of affirmative answers</th>
<th>Population interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Q1 (%)</td>
<td>Q2 (%)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>134</td>
<td>1999</td>
<td>379</td>
<td>99.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>135</td>
<td>2000</td>
<td>839</td>
<td>91.0</td>
</tr>
<tr>
<td>Burma</td>
<td>136</td>
<td>2002</td>
<td>296</td>
<td>82.0</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>137</td>
<td>2004</td>
<td>233</td>
<td>96.0</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>138</td>
<td>2002</td>
<td>1128</td>
<td>58.2</td>
</tr>
<tr>
<td>India</td>
<td>16</td>
<td>2000</td>
<td>1118</td>
<td>98.7</td>
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<tr>
<td>Korea</td>
<td>140</td>
<td>2003</td>
<td>820</td>
<td>93.0</td>
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<tr>
<td>Taiwan</td>
<td>141</td>
<td>1995</td>
<td>2610</td>
<td>87.0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>143</td>
<td>2005</td>
<td>523</td>
<td>68.0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>144</td>
<td>2006</td>
<td>1000</td>
<td>54.6</td>
</tr>
<tr>
<td>Indonesia</td>
<td>139</td>
<td>2002</td>
<td>84</td>
<td>100.0</td>
</tr>
<tr>
<td>Thailand</td>
<td>142</td>
<td>1999</td>
<td>284</td>
<td>57.8</td>
</tr>
</tbody>
</table>

Q1 = Have you ever heard about epilepsy? Q2 = Do you think that epilepsy is a mental illness? Q3 = Do you think that people with epilepsy would not be employed like others? Q4 = Would you allow your child to associate with a child with epilepsy at school or in play? Q5 = Would you allow your child to marry a person with epilepsy? N = number of respondents. NA = not available. *Epilepsy is a form of insanity. †Employers would terminate the employment contract after an epileptic seizure in an employee with unreported epilepsy. ‡Patient with epilepsy can lead a married life.
Validation of the Chinese version of public attitudes toward epilepsy scale in Mainland China

Zongwei Yue, Chanthia Ma, Kheng-seang Lim, Bo Xiao, Qian Wu, Yi Shu, Zhiping Yue, Yelan Wang, Li Feng
Lack of association of ABCB1 haplotypes on five loci with response to treatment in epilepsy

B.S. Haerian \textsuperscript{a}, K.S. Lim \textsuperscript{b}, E.H.M. Mohamed \textsuperscript{a}, H.J. Tan \textsuperscript{c}, C.T. Tan \textsuperscript{b}, A.A. Raymond \textsuperscript{c}, C.P. Wong \textsuperscript{d}, S.W. Wong \textsuperscript{d}, Z. Mohamed \textsuperscript{a}

Association of $ABC\!B\!1$ gene polymorphisms and their haplotypes with response to antiepileptic drugs: a systematic review and meta-analysis

$ABCC2$ rs2273697 and rs3740066 polymorphisms and resistance to antiepileptic drugs in epilepsy cohorts

Pharmacogenomics

Association between $ABC\!B\!1$ polymorphism and response to sodium valproate treatment in Malaysian epilepsy patients

Batoul Sadat Haerian \textsuperscript{1}, Kheng Seang Lim \textsuperscript{2}, Hui Jan Tan \textsuperscript{3}, Elsa Hanifa Mejia Mohamed \textsuperscript{1}, Chong Tin Tan \textsuperscript{2}, Azman Ali Raymond \textsuperscript{3}, Chee Piau Wong \textsuperscript{4}, Sau Wei Wong \textsuperscript{5}, Haslyna Omar \textsuperscript{1}, Harun Roslan \textsuperscript{6}, Zahurin Mohamed \textsuperscript{1}
A Comparison of Five Free Software Solutions for Generating Realistic Human Head Models from Magnetic Resonance Imaging

Mohamed Proctor

Pegah Khosropanah*, Abdul Rahman Ramli, Kheng Seang Lim, Mohammad Hamiruce Marhaban and Anvarjon Ahmedov

Fused multivariate empirical mode decomposition (MEMD) and inverse solution method for EEG source localization

Challenges and Open Issues

Mohammad Ashfak Habib1,2,5, Fatimah Ibrahim1,2, Mas S. Mohktar1,2, Shahrul Bahyah Kamaruzzaman2,3, Kartini Rahmat4, Kheng Seang Lim2,3

World Neurosurgery
HLA-A*24:02 as a common risk factor for antiepileptic drug–induced cutaneous adverse reactions

Objective: To investigate the involvement of human leukocyte antigen (HLA) loci in aromatic antiepileptic drug–induced cutaneous adverse reactions.

Methods: A case-control study was performed to detect HLA loci involved in aromatic antiepileptic drug–induced Stevens-Johnson syndrome in a southern Han Chinese population. Between January 1, 2006, and December 31, 2015, 61 cases of Stevens-Johnson syndrome induced by aromatic antiepileptic drugs and 392 matched drug-tolerant controls were enrolled from 8 centers. Important genotypes were replicated in cases with maculopapular eruption and in the meta-analyses of data from other populations. Sequence-based typing determined the HLA-A, HLA-B, HLA-C, and HLA-DRB1 genotypes.

Results: HLA-B*15:02 was confirmed as strongly associated with carbamazepine-induced Stevens-Johnson syndrome ($p = 5.63 \times 10^{-10}$). In addition, HLA-A*24:02 was associated significantly with Stevens-Johnson syndrome induced by the aromatic antiepileptic drugs as a group ($p = 1.02 \times 10^{-9}$) and by individual drugs (carbamazepine $p = 0.015$, lamotrigine $p = 0.005$, phenytoin $p = 0.027$). Logistic regression analysis revealed a multiplicative interaction between HLA-B*15:02 and HLA-A*24:02. Positivity for HLA-A*24:02 and/or HLA-B*15:02 showed a sensitivity of 72.5% and a specificity of 69.0%. The presence of HLA-A*24:02 in cases with maculopapular exanthema was also significantly higher than in controls ($p = 0.023$). Meta-analysis of data from Japan, Korea, Malaysia, Mexico, Norway, and China revealed a similar association.

Conclusions: HLA-A*24:02 is a common genetic risk factor for cutaneous adverse reactions induced by aromatic antiepileptic drugs in the southern Han Chinese and possibly other ethnic populations. Pretreatment screening is recommended for people in southern China. Neurology® 2017;88:1–9

GLOSSARY

AED = antiepileptic drug; cADR = cutaneous adverse drug reaction; CEE = carbamazepine; HLA = human leukocyte antigen; LTG = lamotrigine; MPE = maculopapular exanthema; PTT = phenytoin; SJS = Stevens-Johnson syndrome; TEN = toxic epidermal necrolysis.
DEPDC5

R54C Mutation of NOTCH3 Gene in the First Rungus Family with CADASIL

Kheng-Seang Lim¹,², Ai-Huey Tan¹, Chun-Shen Lim², Kek-Heng Chua³, Ping-Chin Lee², Norlisah Ramli⁴, Giri Shan Rajahram⁵, Fatimah Tina Hussin⁶, Kum-Thong Wong⁷, Meenakshi B. Bhattacharjee⁶, Ching-Ching Ng²
Conclusion

• Identify own strength
• Form a team
• Establish a database
• Present and discuss
• Network and collaboration

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