Abstract EP057

Table 3: Statistical analysis

<table>
<thead>
<tr>
<th>Correlation</th>
<th>t-statistic</th>
<th>95% Confidence Interval (LL to UL)</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.45</td>
<td>-0.875 to 0.55</td>
<td>0.6</td>
</tr>
<tr>
<td>Weight</td>
<td>0.38</td>
<td>-0.369 to 0.531</td>
<td>0.7</td>
</tr>
<tr>
<td>Height</td>
<td>-0.05</td>
<td>-0.816 to -0.191</td>
<td>0.007</td>
</tr>
<tr>
<td>BMI</td>
<td>1.82</td>
<td>0.059 to 0.752</td>
<td>0.086</td>
</tr>
<tr>
<td>Time to demise</td>
<td>-0.12</td>
<td>-0.849 to 0.444</td>
<td>0.9</td>
</tr>
<tr>
<td>Regression Effect</td>
<td>-0.047</td>
<td>-0.80 to -0.015</td>
<td>0.007</td>
</tr>
<tr>
<td>Height + Age</td>
<td>-0.049</td>
<td>-0.883 to -0.014</td>
<td>0.009</td>
</tr>
<tr>
<td>Height + demt</td>
<td>-0.049</td>
<td>-0.885 to -0.012</td>
<td>0.012</td>
</tr>
<tr>
<td>Height + weight</td>
<td>-0.050</td>
<td>-0.83 to -0.017</td>
<td>0.005</td>
</tr>
</tbody>
</table>

*Pearson’s product moment correlation

Conclusions

The spread of injectate during ESP blocks varied widely and was inversely proportional to the height of the specimen. Consistent spread was observed to the dorsal ramus. Further studies should be conducted on live subjects. Overall, the study provides valuable insights into the pattern and extent of injectate spread in simulated ESP blocks.

Abstract EP058

ASSESSING THE REPRODUCIBILITY AND VARIABILITY OF LOCAL ANAESTHETIC DIFFUSION IN GENICULAR NERVE BLOCK: A CADAVERIC STUDY WITH 3D IMAGING ANALYSIS

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10.1136/rapm-2023-ESRA.120

Application for ESRA Abstract Prizes: I apply as an Anesthesiologist (Aged 35 years old or less)

Background and Aims

Genicular nerve block (GNB) is an increasingly popular technique for pain relief after knee surgery. However, the reproducibility in terms of local anesthetic diffusion in each nerve of the block remains unclear. The objective of present study was to investigate the diffusion of contrast agent following GNB in cadaveric knees and assess the reproducibility of the infiltration volume and its distribution.

Methods

Ten cadaveric knees undergoing 4 ml GNB were included, targeting the superior medial (SM), superior lateral (SL), inferior medial (IM), inferior lateral (IL), and recurrent tibial (RT) genicular nerves. Helical CT scans were performed to assess contrast distribution. Image processing, including segmentation and surface reconstruction, was performed using Amira software. Quantitative analysis was carried out to evaluate the diffusion of the infiltrated volume in each genicular nerve.

Results

The mean volumes (± SD) of the contrast in SM, SL, IM, IL, and RT GNB were 15.2 ± 8.6 ml, 12.2 ± 7.9 ml, 15.0 ± 6.6 ml, 11.9 ± 9.2 ml, and 21.6 ± 15.0 ml, respectively. The mean diffusion in the three axes showed variations and coefficients of variation were calculated for each nerve to assess reproducibility.

Conclusions

This study demonstrates variability in the volume and diffusion of contrast agent following GNB in cadaveric knees. Certain nerves, such as IM, exhibited greater variability compared to others. More research is needed to determine the optimal volume required to cover a relevant bony area for each nerve and to assess whether this diffusion is accompanied by clinically significant outcomes.

Abstract EP059

NATIONAL SURVEY OF WELSH ANAESTHETIC TRAINEES EXPERIENCE OF REGIONAL ANAESTHESIA (RA) TRAINING AFTER INTRODUCTION OF THE ROYAL COLLEGE OF ANAESTHETISTS 2021 CURRICULUM

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10.1136/rapm-2023-ESRA.121

Background and Aims

With the advent of the 2021 RCoA curriculum, there has been a move to produce consultants with broader skill sets. The curriculum now places greater emphasis on experience and competence in RA.

Methods

To gain insight into the trainee experience a nationwide survey was sent using Google Forms to all welsh anaesthetic trainees. The results were compared to a previous survey carried out by Fox et al in 2016, focusing on changes in the last seven years in relation to availability of training. The results in teaching, experience and confidence were