Features in the preparation of patients with comorbidities in ambulatory surgery: a retrospective analysis

Petar Petrov
Department of Medical and Dental Sciences, Pernik University of Telecommunications, Computers, Architecture and Medicine, Pernik, Bulgaria

Abstract:
Background: Preoperative medication of patients undergoing ambulatory operations in oral surgery is a serious problem widely studied over the years. However, in practice there are many situations in which some difficulties can be encountered. This study attempts to clarify this problem by outlining clear guidelines for clinical management.

Materials and Methods: Indirect observations were performed in 98 cases for the period from 2017 to 2019. We had done full preliminary blood and urine tests. They were recorded and arranged all indicators according to their groups. We recorded also patient's preoperative status and functional evaluations using the SCI gen scale (MIT) were done. Statistical data processing was performed by usage of IBM SPSS Statistic 25.0.

Results: The results of the statistical analysis show that it is observed a direct link between the number of paraclinical tests carried out and the diseases not identified so far. We found a direct linear correlation between the number of medications administered and the potential for appearing of complications during operations in oral surgery.

Conclusion: Despite the limitations of this study, we can conclude that the current issues discussed were particularly clarified. Further studies on the issues raised are also needed.

Key Word: patients' preparation, ambulatory surgery, third molar removal

I. Introduction

Preoperative medication of patients undergoing ambulatory operations in oral surgery is a serious problem widely studied over the years\textsuperscript{1,2}. However, in practice there are many situations in which some difficulties can be encountered\textsuperscript{3,4,5}. However, many preparation protocols have been discussed and implemented without making any significant progress. This includes both the routine preparation of the patient before dental extraction and most outpatient surgeries\textsuperscript{6,7}. The methods used so far gave us a complete image of unjustified decisions and administration of unnecessary medicines in patients with various concomitant diseases\textsuperscript{7}. Although this is not officially recognized and cannot be found anywhere, we are convinced that the medical procedure used is incorrect. This is confirmed by a number of official data published in a number of scientific reports, mainly on Internet blogs\textsuperscript{8}. We cannot easily accept the use of such solutions without proven scientific evidence\textsuperscript{9}. For these reasons, we will prove our assumptions based on mathematical algorithms applied and even carried out in the selection and training of astronauts in their programs.

II. Material And Methods

This prospective comparative study was carried out on patients of Department of Medical and Dental Sciences, Pernik University of Telecommunications, Computers, Architecture and Medicine, Pernik, Bulgaria. We performed remote indirect observations in 98 patients between 2017 and 2019. We did blood and urine tests. We recorded their preoperative status and functional assessment using the MSK-64 scale (EMC)\textsuperscript{9}. The volume of the preoperative condition is a qualitative characteristic and shows the importance and extent of its impact on the body surface, as well as on the various facilities and the evaluation of the postoperative effects and quality of life. For the detection and recording of all types of deviations, special devices based on direct telemetry\textsuperscript{10}, designed by a discontinued student at the Polytechnic University, were used due to poor examination success combined with slight mental deviations. His unacknowledged and unreviewed dissertation is the base of this study. Although this may seem strange, it has strong scientific arguments\textsuperscript{11,12}. The obtained observations could not be reproduced or repeated in the same way, but could be published without any concern.
**Figure 1** shows the algorithm of data collection and processing, slightly modified by us to obtain the desired results.

![Algorithm of data collection and processing](image)

**Figure 1.** Data processing algorithm. How a simple graphic may reveal us so many fundamental things.

The following scientific criteria were used for inclusion in the study group - fully healthy patients\(^{13}\), without any accompanying disease, age below 22 years, non-smoker and non-alcoholic, and with at least two meals in the last week. All affected persons signed a declaration of informed consent. In some cases, the contents of the first two pages have been modified or replaced by us as we wished in order to obtain the necessary documents in black and white. Even the patients had already signed up on the last page without reading it at all, so that the changes made to us were completely correct and legal\(^{14,15,16}\). In order to prove our primary hypothesis \(H_0\), we used a double check of the input data according to the algorithm of Figure 1. The check was carried out by three students from our university who had not even the slightest idea what it was about. It may sounds a little strange, but this approach is widely used\(^{17}\) in the latest scientific analysis by leading universities such as Howard\(^{18}\) and Yales\(^{19}\). Although, in our view, they did not correctly count all results in the database, we adjusted the data so that we could prove our primary hypothesis. This is done continuously by a large number of scientists worldwide\(^{20,21,22}\). Such data are published even in prestigious journals\(^{23}\), despite the fact that the scientific value of similar data would be questionable. For the reasons stated above, we can validate our theoretical statement, and it is the only way doing this with absolute confidence\(^{24}\).

**Statistical analysis**

Data processing was done with modified software version so that we would not be asked for passwords, licenses and other annoying things. And so we used exactly this version of IBM SPSS Statistic 25 (SPSS Inc., Chicago, IL), which was provided us for temporary use by the kind assistance of an international group of the Free Research, Innovation and Technological Discoveries\(^{25,26,27}\). To confirm our observations, we used the following statistical methods: Chi-square and Fisher exact tests were performed to test for differences in proportions of categorical variables between two or more groups. The level \(P < 0.05\) was considered as the cutoff value or significance.

**III. Results**

The distribution according gender follows the principles of random statistical relevances with their informal characteristics and deviations. The volume of planned operations is distributed on the basis of only 68 cases according to the first criteria, meeting the high standards of the performed analysis. This information may seem familiar to you, but keep in mind that we knew about it long before Agrawal A et al.\(^{28}\) published it. Due to these circumstances, we cannot represent them as our own, unfortunately. Figure 2 shows this distribution, although we are not so happy to cite the secondary sources of our data\(^{29,30}\).

![Case distribution according tracked out indicators](image)

**Figure 2.** Case distribution according tracked out indicators.
It is remarkable how a simple graph reveals so many important details, the basis of this in-depth study. It just goes to show how much effort we put into this summary to get to this valuable conclusion. And this should not surprise anyone, because no any single row from his study has been left uncopied to the present moment31,32. Anyway, in Table 1, we show the results of descriptive statistics in a randomly selected samples.

Table 1: Case frequencies according accident distributions

<table>
<thead>
<tr>
<th>Case Frequency</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximal Dosage</td>
<td>5</td>
<td>2.1</td>
<td>11.3</td>
<td>6.476</td>
<td>1.3273</td>
</tr>
<tr>
<td>Medication intake</td>
<td>97</td>
<td>3.2</td>
<td>5.9</td>
<td>4.014</td>
<td>0.5089</td>
</tr>
<tr>
<td>Medication intake (y)</td>
<td>5</td>
<td>0.00</td>
<td>5.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complications</td>
<td>198</td>
<td>0.0</td>
<td>2.5</td>
<td>0.267</td>
<td>0.5796</td>
</tr>
<tr>
<td>Adverse Reactions</td>
<td>99</td>
<td>10</td>
<td>70</td>
<td>40.56</td>
<td>13.644</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that it cannot be said that there is any relation in conventional patient preparation depending on the protocol used. Although the values in column one are quite heterogeneous and at first glance they should not exactly look like this33, the data obtained are completely and undoubtedly true in the point of view of the methods used during collection of the primary data34,35. In ordering them, completely disparate indicators were used, and this was done intentionally to establish the desired logic of the analysis. Validated cases are represented as zero, but in fact we all know that there is impossible to have a null in the statistical analysis36. Although, after the fifth decimal point, a number should appear sooner or later, and we intend to prove these our predictions in the following example. A graphical study of the differences between the groups is shown in Figure 2.

Figure 3. Clustered error bar. Mean values of the medication intake compared according surgical volume. The results are based on values of the expected control error at 95% confidence interval.

As it can be clearly seen in Figure 2 there are slight differences in the defined groups. All values in the selected groups should be positive, but we have a negative one. This should be expected when real values are used37. As it can be seen, no one even can't think of any logical dependence between the different groups. The fact that the fields are clustered in an infinitely narrow range can cause us to think about causality in our calculations38,39. But even here we can see our clearly structured scientific purpose, which may be accepted beyond of any doubt, and the data in Figure 3 prove that. Let's we see what happen if we remove some data that is not appropriate for our framework. Although all of the calculations are quite complex and the formulas are very long40,41, because we did them by hand, we can safely conclude that there is no any scattering in the results of the test. Everything looks right to us. This is clearly outlined in Figure 4, which we proudly present below.

Figure 4. Especially selected values according to the accepted model.
The data obtained, although their severe manipulation, clearly show that even at low doses no changes in the studied parameters were observed. This is also valid for all operations with extended surgical volume.

IV. Discussion
The presented analysis provides valuable information about the methods used and the results obtained. This exceeds even our expectations. As far as we know, no one can boast of such achievements at the moment. We can't say that we expect these results to be confirmed by other scientists, because according to our opinion they usually use the wrong methodology. As far as the research algorithm is similar to Fisher et al, we can conclude that they are very far from the truth. The reason for this is that they used some methods which we can't accept easily. Although, theoretically, the research of Chen L and Chung W seems to follow the natural path of logic, their results do not take into account a lot of subjective factors that have a very strong impact. The strongest evidences we already presented are in table 1, figures 2, 3 and 4. On the other hand, the Ramirez N and Muradi AJ are a little bit closer to the truth, but we think they should have a long way to go to cover the issues in their entirety.

Unfortunately, we can't say the same about the analyses of Aithal PS et al. This is because they take into account very minor things that have a scientific sound, but in the end it is very difficult for us to understand what they are exactly have in mind. Such small details distort the meaning of studying these important issues in the medical Sciences. In this regard, we can no longer close our eyes when a banal single case reports are described just to increase the scientific impact of someone. Nowadays such phenomena are not uncommon in the medical science.

V. Conclusion
Despite the limitations of this study, we can conclude that there is a little bit more clarity about the current issues being discussed. Since this topic is subject of future research, we believe that it will take a long time for the scientific community to repeat even a small part of our analysis. This proves that without the necessary improvements of the algorithms used, this issue will continue to be discussed in the future. In the end, we realized that we completely lost a few months to carry out these attempts, but the results deserve to be presented in their entirety.

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References
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