Comparison of The Effects of Surgical Smoke on The Air Quality And on The Physical Symptoms of Operating Room Staff

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Study Protocol

Data collection process
<u>Determining the effect of surgical smoke on air quality</u> Taking air samples in the general surgery operating room (n: 45)
1.Example: 45 minutes before the start of the operation 2. Example: 45 minutes from the beginning of the skin incision 3.Example: 45 minutes after the operations are over
<u>Determination of Physical Symptoms Caused by Surgical Smoke on Employees and Comparison</u>
Physicians and nurses in internal units control group(n: 20)
Information Form Throat culture
Case group (n: 19) Physicians and nurses exposed to surgical smoke in the general surgery operating room
1.Before starting the operation Information form Throat culture 2. After the surgery is over Information Form Throat culture

Informed Consent Form

Health workers

This study you participated in is a scientific research and the name of the research is "Comparison of the Effect of Surgical Smoke on Indoor Air Quality and Physical Symptoms of Operating Room Workers". The aim of this study is to determine the physical, chemical, biological and genotoxic risks of surgical smoke on patients and workers with the content analysis of surgical smoke. In this study, after you fill out a short information form, a throat culture will be taken before starting the first surgery of the day and at the end of the last surgery, and you will be asked about the effects of the surgical smoke you have been exposed to acutely at the end of the surgery. The time you are envisioned to take part in this study is 10 minutes before and after the operation, and approximately 30 physicians and nurses working in the operating room are volunteers.

The information you provide regarding this research is your responsibility.

In this research, there may be risks and inconveniences for you during sampling; However, the expected benefits for you are that it reveals the risks and discomfort of the surgical smoke you are exposed to every day.

You or your legal representative will be notified immediately of any developments during the investigation that may be of interest to you. For additional information about the study, or for any problems, undesirable effects or other ailments related to the study, please call Res. 05442458804. See. You can apply to Ganime Esra SOYSAL.

No payment will be made to you for taking part in this research; In addition, no fees will be charged from you or the social security institution you are affiliated with for all examinations, examinations, tests and medical care services within the scope of this research. The expenses for this research will be covered by the researcher.

Taking part in this research is entirely at your discretion. You can refuse to take part in the research or leave it at any stage; This will not lead to any penalties or impairment to your benefit. Failure to fulfill the requirements of the treatment scheme, interrupting the study program, etc., within the knowledge of the investigator or against your will. It may exclude you from research for reasons. The results of the research will be used for scientific purposes; If you withdraw from the study or are excluded by the investigator, medical data about you can also be used for scientific purposes if necessary.

All of your medical and identity information will be kept confidential and your identity information will not be provided even if the study is published, but research audiences, reviewers, ethics committees and officials may access your medical information when necessary. You can also access your own medical information whenever you want (if the treatment is confidential, the volunteer should be informed that they can only access their medical information after analyzing the data).

Consent to Participate in the Study:

I read and listened to the above information that should be given to the volunteer before starting the research. I asked all the questions that came to my mind to the researcher, and I understood all the written and oral explanations given to me in detail. I was given ample time to decide whether I would like to participate in the study. Under these circumstances, I authorize the research director to review, transfer and process my medical information, and I voluntarily accept, without any coercion or pressure, the invitation to participate in the research in question.

A signed copy of this form will be given to me.

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Statistical Analysis Plan

Gas chromatography-Mass spectroscopy TD-GC-MS device used in air analysis shows the results graphically with a program. From the interpretation of the resulting graphics, it was interpreted whether the environmental pollutants are below or above the limit values in terms of indoor air quality.

The data were coded in the SPSS (Statistical Package for the Social Sciences) 22.0 program. Data; expressed as percentage, mean ± standard deviation. Statistical evaluation was performed using number, percentage, Chi-square, and t-test in order to determine the difference between variables. In the evaluation of the findings $p \leq 0.05$; $p \leq 0.01$ and $p \leq 0.001$ were accepted as significant results.