EP23.014 - The importance of pre- and post-genetic counselling for genetic testing in hereditary cancer

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Background / Objectives

Pre- and post-genetic counselling play essential role in facilitating genetic testing for hereditary cancer. Before testing, individuals engage in a thorough discussion with a genetic counselor or healthcare provider. This phase involves educating the individual about the implications of genetic testing, covering potential outcomes, limitations, and the emotional impact of results. Additionally, the counselor evaluates the individual's personal and family history to determine the suitability of genetic testing and to manage expectations effectively. Following testing, post-genetic counselling becomes pivotal. It involves interpreting the test results within the context of the individual's health and family background. The counselor helps the individual comprehend the implications of the results, including any associated risks or preventive measures. Furthermore, they offer support and guidance in making informed decisions regarding medical management and in communicating results to other family members.

The purpose of this study is to highlight the importance of pre- and post- genetic counselling based on the experience of Genekor laboratory.

Methods

In our practice, we've had the privilege of working with a diverse group of 650 patients who have been diagnosed with cancer. Recognizing the complexity and potential hereditary components of their conditions, we've taken proactive steps to offer comprehensive genetic testing using a Next-Generation Sequencing (NGS) panel consisting of 52 genes associated with various types of cancer. Before proceeding with the genetic testing, each patient undergoes pre-genetic counseling. Once the genetic testing is completed, our commitment to patient care doesn't end there. We recognize the importance of post-genetic counseling in providing patients with the necessary support and guidance to comprehend and navigate the implications of their test results (**Figure 1**).

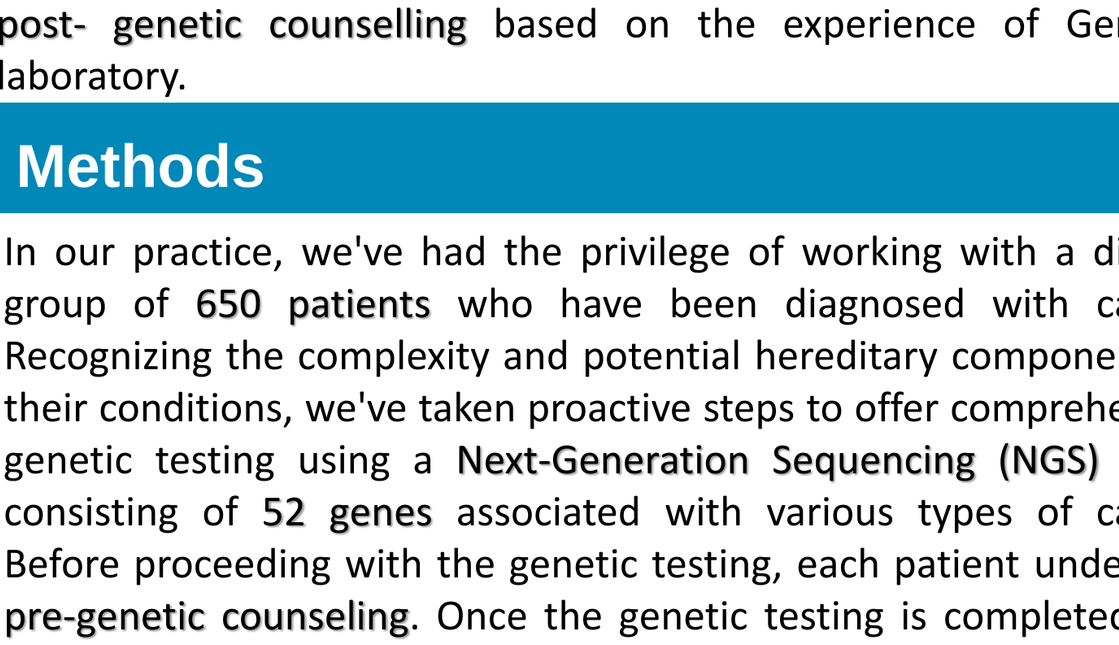

Figure 1. Schematic workflow of this study.

Results

- Out of 650 patients with cancer referred to the laboratory for multi-gene testing 630 (96.9%) underwent pre-genetic counselling, whereas 3.1% declined to provide information.
- In most patients (98%), the recommendation for genetic testing was made by the referring physician, while 2% were informed by other sources.
- A large majority of patients (99%) received information about potential outcomes from their physician.
- It is noteworthy that 86.6% of those examined were also motivated to undergo genetic testing to benefit their children.
- The average duration of pre-genetic counselling and family history collection was 30 minutes.
- Among the 650 patients, post-genetic counselling was conducted to 90 (13.8%) by experts from our laboratory.
- All patients seemed to fully understand the significance of the result and intended to share it with their relatives.
- In 80% of those examined, relief was expressed upon receiving their results, while 2% expressed surprise at the final outcome.

Conclusion

- Providing both pre- and post-genetic counseling ensures that individuals undergoing genetic testing for hereditary cancer are well-informed, emotionally prepared, and supported throughout the entire process.
- This comprehensive approach enhances the accuracy and effectiveness of genetic testing and facilitates informed decision-making regarding healthcare and risk management strategies.

References

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