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Genetic testing ethical issues

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INTRODUCTION

Genetic testing, a cornerstone of modern medicine, holds promise and peril in equal measure. As the landscape of obstetrics and gynaecology evolves, so too do the ethical considerations surrounding genetic testing. From counseling dilemmas to the intersection of genetics and assisted reproductive technologies, obstetrician-gynecologists face complex decisions that shape the future of patient care. This article delves into the ethical nuances of genetic testing in the realm of obstetrics and gynaecology, offering insights and guidance for practitioners grappling with these intricate issues.

DESCRIPTION

Changes in DNA sequence or chromosomal structure are detected via genetic testing, commonly known as DNA testing. Measurements of the results of genetic alterations, such as RNA analysis as a gene expression output or biochemical analysis to quantify particular protein output, are examples of genetic testing. In the field of obstetrics and gynaecology, genetic testing is expected to become more common. Physicians should become aware with the current variety of genetic testing, as well as the tests' limitations, to ensure that patients receive the best possible treatment. Clinicians should be able to recognize patients who are candidates for genetic testing in their practises. Patients, who are pregnant or planning pregnancy and are at danger of giving birth to afflicted children, as well as gynaecological patients who may have or be susceptible to specific forms of cancer, will be considered candidates. The objective of this committee opinion is to explore some of the ethical concerns surrounding genetic testing and to give advice for obstetrician-gynecologists on how to utilize genetic tests appropriately. When obstetrician-gynecologists are confronted with these difficulties, expert advice and referral are likely to be required. Counseling and consent difficulties for children's testing are distinct. Although pediatricians or geneticists are most often called upon to test infants for genetic illnesses, obstetricians may be requested to screen previously born children of parents who have been discovered to be carriers of genetic diseases through prenatal testing. There will be times when it can be established that a kid is at risk for an unfavorable clinical event in the future, but there will be no knowledge on treatments that may lessen the chance of the occurrence or its severity. In that case, the advantages of evaluating a youngster aren't always obvious. In addition to ensuring proper consent, the obstetrician–gynecologist ordering genetic tests should be aware of when it is appropriate to test, which specific test to order, and "what information the test can provide, the limitations of the test, how to interpret positive and negative results in light of the patient's medical or family history," among other things. The health care practitioner who orders the tests has a responsibility to appropriately utilize and interpret the results, or to send the patient to someone who does. Because performing all of these duties is extremely difficult when genetic tests are sold directly to consumers, this marketing strategy has major limits. There are at least two difficulties that arise when genetics and Assisted Reproductive Technologies collide (ART). First and foremost, it is necessary to examine whether all people, regardless of genotype, should be able to get ART using their own gametes.

CONCLUSION

When parents' demands to pick a certain genetic feature appear to be contrary to the best interests of the future child, reproductive endocrinologists and embryologists may face even larger problems. Genetic testing is expected to play an increasingly important role in obstetrics and gynaecology. Physicians should be aware with the current variety of genetic testing, as well as their limitations, in order to provide the best possible treatment to their patients. They should also be mindful of the negative effects that a genetic diagnosis may have on their patients. The doctor should try to keep such effects to a minimum. A family's genetic information is unusual in that it is shared. Physicians should tell their patients of this information and assist them in preparing for their findings, including thinking about disclosing their results to their biologic family.