Abbreviated Key Title: SAS J Med ISSN 2454-5112

Journal homepage: https://saspublishers.com

3 OPEN ACCESS

Medicine

Practices and the Interest of Practitioners Regarding Female Fertility in Morocco

Soukaina KHATEM^{1*}, Harou Karam²

1Department of Pharmacology and Toxicology, Clinical Research Center, Mohammed VI University Hospital, Marrakesh, Morocco 2Department of Obstetrics and Gynecology, Mohammed VI University Hospital, Marrakesh, Morocco

DOI: <u>10.36347/sasjm.2024.v10i05.016</u> | **Received:** 08.04.2024 | **Accepted:** 12.05.2024 | **Published:** 16.05.2024

*Corresponding author: Soukaina KHATEM

Department of Pharmacology and Toxicology, Clinical Research Center, Mohammed VI University Hospital, Marrakesh, Morocco

Abstract

Original Research Article

Treatment regimens for cancer patients are known for their toxicity and pose a threat to their fertility. This study takes the form of a survey aimed to analyzing the current knowledge and motivation of physicians involved in cancer care. The majority of surveyed physicians believe that fertility is a concern for women cured of cancer. A significant portion of physicians do not offer preservation methods to their patients, either due to the unavailability of an oncofertility center or due to the severity of the type of cancer. The main challenge in the coming years will be to improve access to fertility preservation techniques for patients whose treatments could affect their ovarian reserve.

Keywords: Toxicity- Treatment- oncofertility.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

Introduction

Means to prevent the toxicity of treatments to improve the chances of preserving fertility exist. Until recently, they were sometimes unthinkable, even taboo topics. Now, there is open discussion about these techniques, which offer hope to patients and propel them toward a future of healing. This study aims to assess the practices and the interest of practitioners regarding the fertility of their patients [1, 2].

MATERIALS AND METHODS

This study takes the form of a survey aimed at analyzing the current knowledge and motivation of physicians involved in cancer management. The survey was conducted over a period of 2 months, from February 1, 2018, to March 31, 2018. The practitioners selected were resident physicians undergoing training at CHU Mohammed VI: gynecologic surgeons, medical medical hematologists, oncologists, oncologists, all involved in the care of cancer patients. The survey was conducted using a written questionnaire, inviting practitioners to respond anonymously. The questionnaire consisted of closed-ended questions with response options: yes/no/sometimes, or multiple-choice questions. Practitioners responded to the questionnaire anonymously and confidentially. Data entry and analysis were performed using "Microsoft Office Excel 2013" software.

RESULTS

The total number of responding physicians to our questionnaire is 66. There are 38 female participants in our study, representing 57.58%, compared to 28 males, representing 42.42%. Regarding the discussion of gonadotoxicity of anticancer treatments, 42% of physicians always address the topic, while 26% never do. However, 32% occasionally broach the subject. 85.96% discuss the risk of infertility with patients before anticancer treatment, while 14% address it during or at the end of treatment. Practitioners believe that fertility is a concern for women cured of cancer, with 46 of them, representing 70% of the sample, sharing this view. The majority of physicians, specifically 35 of them (54%), discuss fertility preservation options starting from the initial consultation, while 31 (46%) do not. Furthermore, according to the responses, 40 physicians noted that patients themselves bring up the topic of fertility preservation during consultations, accounting for 60% of the respondents. Most oncologists and hematologists, totaling 79%, refer patients to a specialized oncofertility gynecologist or assisted reproductive technology (ART) center, while 21% did not take any action. Similarly, 89% of gynecologists refer their patients to a specialized oncofertility gynecologist, while 11% did not take any action. As for fertility preservation proposals, 56.14% of physicians did not propose it due to the unavailability of a fertility preservation center, while 35.09% refrained

Citation: Soukaina KHATEM & Harou Karam. Practices and the Interest of Practitioners Regarding Female Fertility in Morocco. SAS J Med, 2024 May 10(5): 373-375.

due to the severity of the disease, and 8.77% did not due to patient or legal guardian refusal.

DISCUSSION

In our study, a significant number of surveyed practitioners (42%) consistently discuss the potential infertility of treatments with their patients. The majority (70%) consider fertility to be a concern for women cured of cancer. Most practitioners (85.96%) believe it is appropriate to discuss fertility preservation options with patients starting from the initial consultation.

In the PACA-Corse region [3] in 2012, a questionnaire completed by 225 practitioners revealed that during the initial consultation, 24% of physicians "always" informed their patients about the risks of infertility after anticancer treatment, 30% "often," 32% "rarely," and 14% "never." Regarding the possibilities of fertility preservation before treatment, 18% "always" informed their patients, while 17% "never" did.

A study conducted at the University of Bordeaux [4] found that most surveyed practitioners occasionally discuss the potential infertility of treatments with their patients. None reported "never" discussing it. The majority consider fertility to be a concern for women cured of cancer. However, the number of patients referred to a fertility specialist varies greatly among practitioners. Most practitioners believe it is appropriate to discuss fertility with patients starting from the initial consultation.

It appears that physicians primarily address the immediate or threatening complications of treatments rather than the issue of fertility. Some practitioners may not fully realize the importance of fertility for their patients. Others find it challenging to broach the subject with patients facing a very poor prognosis. Finally, lack of time, knowledge, and discomfort experienced by the physician are also cited as explanations [5].

In our series, 60% of physicians reported that patients themselves bring up the topic of oncofertility during consultations. This percentage may be influenced by several factors, including age, marital status, socioeconomic criteria, lack of time during consultations, but above all, the level of education of the patients.

In California, among 1041 studied patients, age and desire for pregnancy at the time of diagnosis, as well as education level, are significantly associated with receiving information about fertility preservation methods. Age and desire for pregnancy at the time of diagnosis, parity, and education level are significantly associated with undertaking fertility preservation measures [6].

The difference regarding education level is explained by the fact that patients with higher education

are more likely to broach the topic of fertility during consultations. If the subject is not addressed by the practitioner, they are more inclined to seek information on their own [7]. Another explanation is the trend towards delayed childbearing in this socioeconomic class.

In our study, the reason preventing 56.14% of physicians from proposing a fertility preservation method to their patients is the unavailability of an oncofertility center (56.14%), followed by the severity of the tumor pathology at 35.09%.

In North Carolina in 2007 [8], the most commonly cited reasons for not discussing the topic are: poor prognosis of the tumor (53%), urgency to start treatment (24%), and the patient's non-nulliparity (24%). Nearly half of the practitioners (45%) have never referred patients to a fertility specialist, while only 15% do so as part of routine practice. The most frequent reasons for not referring a patient for specialized consultation are the patient's lack of interest in fertility preservation (39%) and the urgency to initiate treatment (13%). However, practitioners' perception of patients' lack of interest contradicts patients' expectations found in various studies [9]. All practitioners agree that they have a responsibility to inform patients about the possibility that treatments may permanently affect their fertility [8].

It is also worth noting that the lack of information among oncology care teams, for example, can explain the heterogeneity in access to patient management [10, 11].

CONCLUSION

The main challenge in the coming years will be to improve access to fertility preservation techniques for patients whose treatments could affect their ovarian reserve.

REFERENCES

- Isachenko, V., Dittrich, R., Keck, G., Isachenko, E., Rahimi, G., Van Der Ven, H., ... & Mallmann, P. (2012). Cryopreservation of ovarian tissue: detailed description of methods for transport, freezing and thawing. Geburtshilfe und Frauenheilkunde, 72(10), 927-932.
- 2. Anderson, R. A., Wallace, W. H. B., & Telfer, E. E. (2017). Ovarian tissue cryopreservation for fertility preservation: clinical and research perspectives. *Human Reproduction Open*, 2017(1), hox001.
- 3. Préaubert, L., Poggi, P., Pibarot, M., Delotte, J., Thibault, E., Saias-Magnan, J., & Courbière, B. (2013). Fertility preservation among patients with cancer: report of a French regional practical experience. *Journal de gynecologie, obstetrique et biologie de la reproduction*, 42(3), 246-251.

- 4. Aurélie, C., Tunon, D. E., & Grynberg, M. (2015). Oncofertilité dans le cancer du sein, évaluation des connaissances et des pratiques en Aquitaine: sontelles au goût du jour? Université de Bordeaux, Ufr Des Sciences Medicales.
- 5. Mailliez, A., Decanter, C., & Bonneterre, J. (2011). Adjuvant chemotherapy for breast cancer and fertility: estimation of the impact, options of preservation and role of the oncologist. *Bull Cancer (Paris)*, 98(7), 741-751.
- Letourneau, J. M., Smith, J. F., Ebbel, E. E., Craig, A., Katz, P. P., Cedars, M. I., & Rosen, M. P. (2012). Racial, socioeconomic, and demographic disparities in access to fertility preservation in young women diagnosed with cancer. *Cancer*, 118(18), 4579-4588.
- 7. Duffy, C. M., Allen, S. M., & Clark, M. A. (2005). Discussions regarding reproductive health for young women with breast cancer undergoing

- chemotherapy. *Journal of Clinical Oncology*, 23(4), 766-773.
- 8. Forman, E. J., Anders, C. K., & Behera, M. A. (2009). Pilot survey of oncologists regarding treatment-related infertility and fertility preservation in female cancer patients. *The Journal of reproductive medicine*, 54(4), 203-207.
- 9. Ah, P. (2004). Web-based survey of fertility issues in young women with breast cancer. *J Clin Oncol.*, 22(20), 4174-4183.
- Grynberg, M., Feyereisen, E., Scheffer, J. B., Koutroubis, P., Frydman, R., & Fanchin, R. (2010).
 Early follicle development alters the relationship between antral follicle counts and inhibin B and follicle-stimulating hormone levels on cycle day 3. Fertility and sterility, 93(3), 894-899.
- 11. de Vet, A., Laven, J. S., de Jong, F. H., Themmen, A. P., & Fauser, B. C. (2002). Antimüllerian hormone serum levels: a putative marker for ovarian aging. *Fertility and sterility*, 77(2), 357-362.