

INTRODUCTION

BACKGROUND AND AIM

Cervical cancer is a prevalent malignancy among Filipino women¹. Patients are usually managed with radiotherapy and concurrent chemotherapy. Unfortunately, the risk of gonadal damage from cancer treatment is extremely high² and suitable options for fertility preservation remain as a major concern among those who still desire future reproduction despite the cancer. The aim of this paper is to report two cases of women with advanced cervical cancer who underwent fertility preservation procedures and to discuss the available and appropriate treatment options for fertility preservation among such women.

METHODS

Two cases of young women with advanced cervical cancer who both desired fertility preservation were identified. Using PUBMED, a literature search and review was conducted regarding the expected reproductive damage after cancer treatment and the recommended fertility preservation options in such cases.

RESULTS

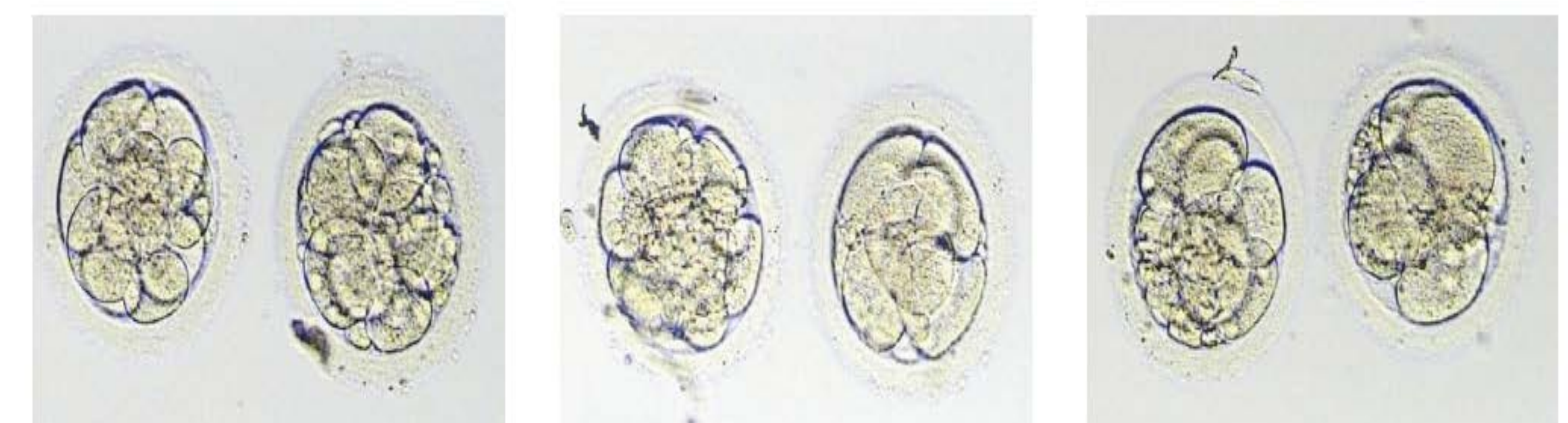
The two cases of advanced cervical cancer requiring fertility preservation are summarized in Table 1. Both cases underwent combined embryo cryopreservation (Image 1 and 2) and ovarian tissue cryopreservation. Both cases achieved cancer remission but there was no ovarian and uterine function after chemoradiation including the second case wherein ovarian transposition was performed. The first case achieved a pregnancy and livebirth using a surrogate carrier, whereas additional fertility treatment for the second case is still pending. According to literature, embryo cryopreservation with frozen embryo transfer through a surrogate has been the best-established and most widely used method of fertility preservation in such women⁴. The success of ovarian tissue cryopreservation with transplantation and ovarian transposition are still limited but may be an option for fertility preservation⁴.

CONCLUSION

Fertility preservation among young women with advanced cervical cancer should be one of the goals of cancer treatment. However, because of the severe reproductive damage after chemoradiation, couples need to be counseled that fertility treatment using a surrogate is a likely option in such cases.

Case	Diagnosis	Cancer Treatment	Fertility Preservation Procedure	Outcome
A	33 year old G0 Non-Keratinizing Squamous Cell Carcinoma of the Cervix Stage 1B2	Platinum-containing chemotherapy + external beam radiation therapy and brachytherapy	Embryo Cryopreservation	Live birth through a surrogate carrier using the cryopreserved embryos
			Bilateral oophorectomy with ovarian tissue cryopreservation	Cryopreserved ovarian tissues screened and deemed suitable for future transplant
B	31 year old G0 Squamous Cell Carcinoma of the Cervix (Large cell non-keratinizing) Stage II-B	Platinum-containing chemotherapy + external beam radiation therapy and brachytherapy	Embryo Cryopreservation	Pending transfer of cryopreserved embryos via surrogate
			Unilateral oophorectomy with ovarian tissue cryopreservation	Cryopreserved ovarian tissues
			Unilateral ovarian transposition	Silent and inactive ovary

Table 1. Two Cases of Cervical Cancer Requiring Fertility Preservation

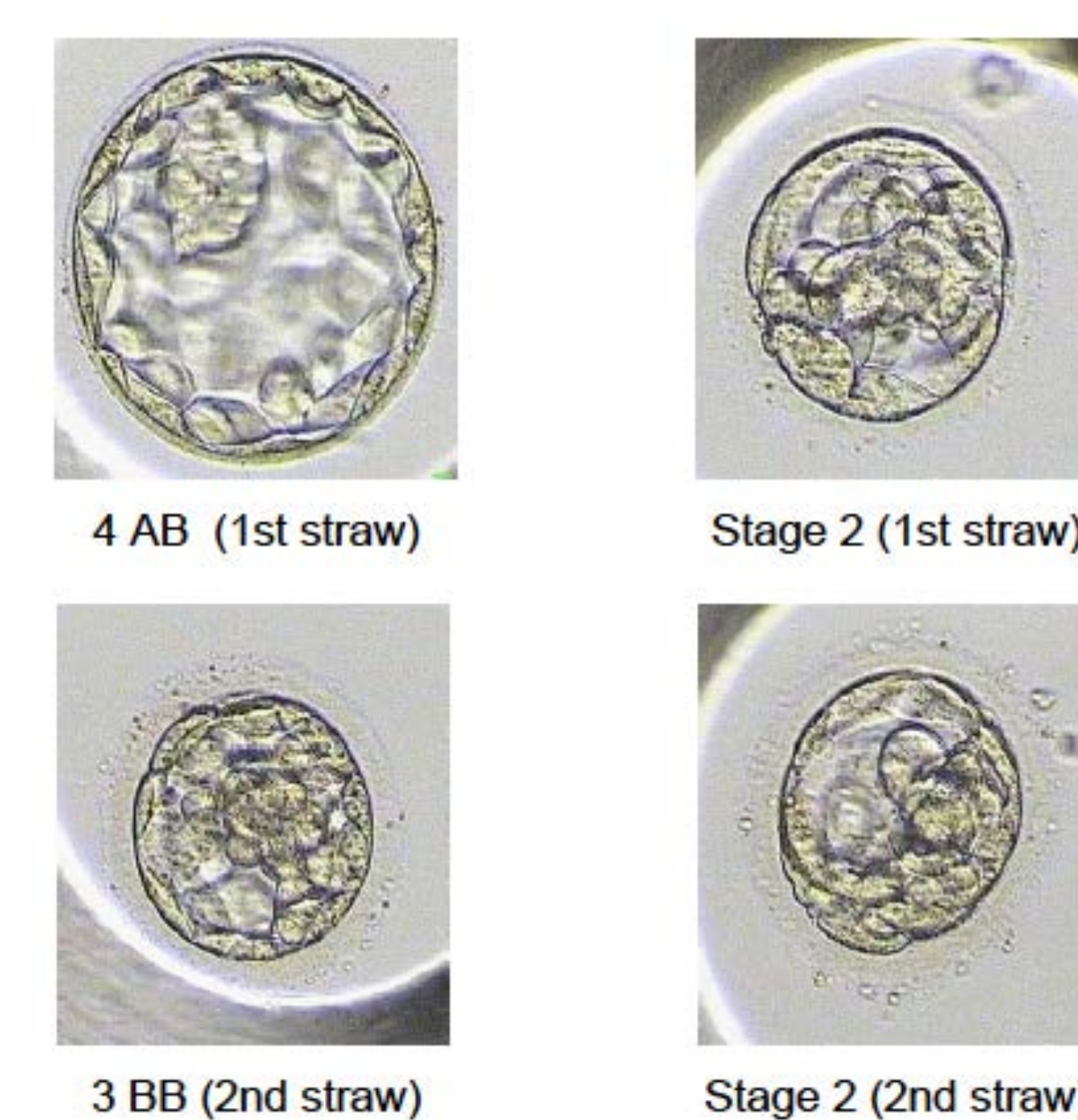


8cells (Gr.1- & Gr.2+)

8cells Gr.2 & 7cells Gr.2

7cells Gr.2 & 5cells Gr.2-

Image 1. Embryo Cryopreservation for Patient A



4 AB (1st straw)

Stage 2 (1st straw)

3 BB (2nd straw)

Stage 2 (2nd straw)

Image 2. Embryo Cryopreservation for Patient B

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