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ARCHIVES OF HELLENIC MEDICINE: ISSN 11-05-3992

BRIEF COMMUNICATION
ΒΡΑΧΕΙΑ ΔΗΜΟΣΙΕΥΣΗ

Managing ovarian cancer during pregnancy
The beneficence-based approach: Maternal autonomy versus the maternal-fetal conflict

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Η αντιμετώπιση του καρκίνου των ωοθηκών κατά τη διάρκεια της εγκυμοσύνης. Εμβρυομητρική αντιπαράθεση – προσεγγίζοντας το κοινό όφελος

Περίληψη στο τέλος του άρθρου

Key words: Management, Ovarian cancer, Pregnancy

Ovarian tumours during pregnancy complicate as many as one in 1,000 pregnancies. Of these tumors approximately 3–6% is malignant. Ovarian cancer is the second most common gynecological malignancy complicating pregnancy except for cervical cancer, affecting 1 in 12,500–25,000 pregnant women.[1] But evidence-based clinical guidelines on how best to manage ovarian cancer in such patients have yet to be developed due to a lack of prospective randomized trials and cohort studies.[2] As with any form of pregnancy-associated cancer, the issue of optimal maternal therapy versus fetal well-being is inevitably raised as both patient and clinician are forced to confront with "the diametrically opposed facts of a life-giving and a life-threatening process".[3] Managing these patients from an ethical perspective is therefore very challenging.

Submitted 30.6.2008
Accepted 2.9.2008

MANAGEMENT OF THE PREGNANT WOMAN WITH CANCER: AN ETHICAL PERSPECTIVE

The management of malignancy in a pregnant woman is dependent on multiple factors including her physical state, tumor type and stage, gestation, as well as maternal and fetal prognosis. Given a lack of evidence-based clinical guidelines, decision for the most appropriate diagnostic and therapeutic strategy depends on the effect of cancer on pregnancy (and vice versa) with key ethical points.[4]

How then should ovarian cancer in a pregnant woman be managed? Surgical treatment is the same as that in non-pregnant patients. Further surgical management depends on the stage, type and presence of the metastatic pathway.[5] Essentially there are two treatment options. First, conventional treatment with primary surgery involving full pelvic clearance and termination of pregnancy, followed by adjuvant chemotherapy, if needed. Second, conservative surgery involving unilateral oopherectomy, omectectomy and lymphadenectomy. Pregnancy would be conserved and adjuvant chemotherapy is given post-surgery followed by total abdominal hysterectomy and oopherectomy after delivery.

From a legal perspective, in most cases is relatively straightforward as the fetus has no rights but morally the question is much larger. Ultimately, a decision has to be made by the mother either to terminate the fetus or allow it to survive at an unquantifiable risk from the chemotherapy. On the basis of the medical model of pregnancy –which views the mother and fetus as two separate patients– two key ethical issues are raised. The first concerns the principle of autonomy with regards to the mother's rights in terms of self-determination (defined by Scott as "a person's interest and right in reflectively making significant personal choices")[6] as well as bodily integrity (being able to choose what happens to your body)[6] and raises the question: Should this give way to the clinician's duty to ensure maternal and fetal beneficence? In other words is it right for the clinician to allow the mother to put the fetus at risk to optimize her own survival, and, conversely, should preservation of the fetus be allowed if considered to be a potential risk to the mother? The second issue addresses the conflict between optimal maternal therapy (i.e. maternal beneficence) versus fetal beneficence and raises the key question: If the clinician disregards maternal autonomy

in favor of the beneficence approach and is unable to implement the principle of justice (by trying to distribute the benefits and harms equally to the mother and fetus) who then should win this conflict? This then brings the moral value of the fetus into question.

Option 1: Allowing maternal autonomy to override the beneficence-based approach

Respect for patient autonomy (deliberated self-rule) is one of four "prima facie" ethical principles forming the basic moral analytical framework of medical ethics. The term "prima facie" essentially means that each principle is binding unless it conflicts with any of the other three ethical principles (beneficence, non-maleficence and justice), in which situation we must then choose between them.[4] Essentially we must decide which has primacy: Our duty to respect patient autonomy or to ensure maternal and fetal beneficence.

We would choose the option of allowing maternal autonomy to override the beneficence-based approach of the clinician and let the mother decide whether to act in either the best interests of herself or her child. As with any other patient, respect for the pregnant woman's autonomy should be at the core of the clinical encounter and take into account her own perspective of her best interests and personal well-being. The doctor has an autonomy-based duty to the mother but not the fetus as it is not yet developed enough to express its own beliefs.

Option 2: Overruling maternal autonomy with the beneficence-based approach and dealing with the subsequent maternal-fetal conflict of interests

We will now look in turn at the two possible scenarios which could occur by opting for the beneficence-based approach and why it should be rejected. Only the moral, not the legal consequences will be addressed. Firstly, what if the patient decides to preserve the fetus and receive adjuvant chemotherapy, going against what the clinician thinks is in the best interest of either the mother or fetus (or both)? Are either maternal or fetal beneficence actually at risk?

Let us look firstly at maternal beneficence. In this situation many would agree that preserving the fetus is unlikely to be a risk to the mother during the remainder of the pregnancy. Although only conservative surgery would be performed to allow the fetus to survive, further surgical debulking could be carried out with total pelvic clearance after delivery. With no evidence in the literature, there is also currently no reason to suspect that maternal response to chemotherapy could be jeopardized by being pregnant. The fact that little is also understood of the effects of pregnancy on malignancy adds to the lack of clarity concerning whether maternal beneficence is actually at risk if the fetus is preserved.

Let us now address the risks to fetal beneficence. The effects of chemotherapy on the developing fetus are relatively poorly understood with the pharmacokinetics in particular of platinum based therapy (used first-line in the treatment of ovarian malignancies) remaining unclear. However, although limited, there is evidence in the literature of the successful deliveries and subsequent development of babies born to mothers undergoing platinum based chemotherapy during pregnancy.[7,8] It should be stressed that chemotherapy is contraindicated during the first trimester of pregnancy because of the high rate of abortion[9,10] and abnormal fetal development,[11] whereas it is compatible in the second or third trimester when the risk of congenital malformation for foetuses exposed to chemotherapy is no greater than the general population.[12,13] However, there are non teratogenic effects of chemotherapy such as intrauterine growth restriction (low birth weight) or effects on the central nervous system as it develops throughout pregnancy.[13–15] Until now, no studies have evaluated the long-term consequences for children exposed to intrauterine chemotherapy.

However, to avoid dismissing the beneficence-based approach too hastily, let us now look at the second possible scenario and the problems that could be raised by opposing the patient's decision to terminate the pregnancy. It could be argued that by doing so you are helping to save a life (the fetus) but at what cost? In terms of maternal beneficence preventing the termination may actually do more harm than good by causing her and her family considerable psychological distress. With regards to fetal beneficence, it could be argued that it is not in the fetus' best interest to be born to a mother who may not even live to see its fifth birthday. Because the risk of chemotherapy to the fetus is unquantifiable, it could also be disputed that by opting for a termination she is fulfilling her responsibility as a mother by protecting her unborn child from physical harm and a potentially mother-less future. In this instance, the mother also has a duty to her first child and her decision to terminate may improve her chances of survival by allowing earlier removal of macro/microscopic disease and therefore give her more time to look after her daughter. Again it seems that opposing the mother's decision (this time however to terminate) highlights some key flaws in the beneficence-based approach that have all contributed to our decision to reject this option.

At the heart of the beneficence-based approach lies the moral status of the fetus. However conflicting individual and collective views on morality make reaching a consensus on this issue impossible. On one side the fetus has full human rights from the moment of conception, on the other it is merely at this stage a mass of cells. Therefore it seems that a solution to the maternal-fetal conflict of the beneficence-based approach is actually to give back autonomy to the pregnant woman.

In summary we think that maternal autonomy should be the prima facie principle overruling the beneficence-based approach and maternal-fetal conflict which inevitably ensues. The patient alone should determine whether her interests should prevail over those of the fetus. An interdisciplinary team approach must also be adopted to draw upon all relevant support and expertise to help the patient weigh up the benefits and risks of each treatment option and come to terms with her final decision.

ΠΕΡΙΛΗΨΗ

Η αντιμετώπιση του καρκίνου των ωοθηκών κατά τη διάρκεια της εγκυμοσύνης. Εμβρυομητρική αντιπαράθεση – προσεγγίζοντας το κοινό όφελος

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Αρχεία Ελληνικής Ιατρικής 2009, 26(3):404–406

Η αντιμετώπιση εγκύου γυναίκας με καρκίνο των ωοθηκών καθιστά απαραίτητο τον υπολογισμό των επιδράσεων της κακοήθειας στην υγεία της ίδιας της γυναίκας αλλά και του εμβρύου, καθώς και των αλλαγών τόσο στις διαγνωστικές προσπελάσεις όσο και στην επιλεγόμενη θεραπευτική προσέγγιση που επιβάλλει η κατάσταση και η ηλικία της κύησης. Η χρήση των υπερήχων κατά τη διάρκεια της κύησης έχει οδηγήσει στη συχνότερη ανίχνευση εξαρτηματικών όγκων καθιστώντας τη διάγνωση και την αντιμετώπισή τους εξαιρετικά μεγάλη «πρόκληση».

Λέξεις ευρετηρίου: Αντιμετώπιση, Εγκυμοσύνη, Καρκίνος ωοθηκών

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