EDITORIAL

A Case Of Malignant Melanoma in Pregnancy

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This patient was a 33 year old, gravida 5, para 4, which is a little high in our country. She had noticed a brown-pigmented mole on her leg, which she had had for about two years. She had shown this to some healthcare workers, but they had reassured her. At 17 weeks pregnancy it was becoming quite large and ulcerated and she was referred to see a plastic surgeon, who undertook an excisional biopsy and this confirmed the diagnosis of malignant melanoma. There are various ways of classifying melanoma. The Breslow classification is thought to be the most prognostic, particularly for deeply invading lesions as this one was, measuring 6.2mm. This corresponds to Stage 2C, or Clarke's level V.

The real difficulty for us with this particular individual was that on the ultrasound scan there was a singleton pregnancy with a normal looking placenta and normal liquor, but there was a uterine mass, which had not been seen on the 11 week scan. It was on the right side, it seemed to have the appearance of myometrium, it would possibly have passed for a rudimentary horn in a unicorunate uterus, but the concern clearly was that this was a metastisis from melanoma and that threw us into quite some difficulties deciding how to care for her.

Now the implications of this diagnosis for the mother was that she had a very poor prognosis really in any case. Furthermore, there was risk to the fetus. Malignant melanoma is one of the commonest tumours that causes metastasis from the mother to the fetus and where placenta is involved there is a 22% risk that the fetus will develop metastases. In the few studies that have been published on this, more or less all of these babies will die. To consider how we would plan her management we needed to do a little bit of background thinking.

The incidence of melanoma is increasing slowly in the UK and America. It is thought now that there is a 1% lifetime risk. The average age of presentation is 45 years old. One third of the patients are of child bearing age. It accounts for 8% of malignant disease that occurs in pregnancy. As far as this relationship to hormones is concerned early studies did show a large number of oestrogen, progesterone and androgen receptors on malignant melanoma cells. We know that in pregnancy that MSH increases and pigmentation tends to increase also. Some studies suggest pregnant women have worse survival. With more modern monoclonal antibody analysis, in fact the receptor count on malignant melanoma cells is quite low. There does not seem to be an increased incidence in women taking the combined pill and

treatment attempts with anti-oestrogen's have been very disappointing. As I said pregnant women possibly do slightly worse, but the results are conflicting and where the studies have been properly stratified or staged there is probably no difference in five year survival.

We obviously has a problem here with potential metastasis and how we would best treat this women in order to enable her the best chance of survival. Chemotherapy has been used with malignant melanoma and agents that seem to offer some sort of effectiveness include INF and Dacarbazine. INF has been used in pregnancy for conditions such as myeloma, but at much lower doses than is required for melanoma and there is really no certainty that it would be safe to give that. Dacarbazine has been used in pregnancy without significant fetal side effects, other than possibly a relationship with intrauterine growth retardation.

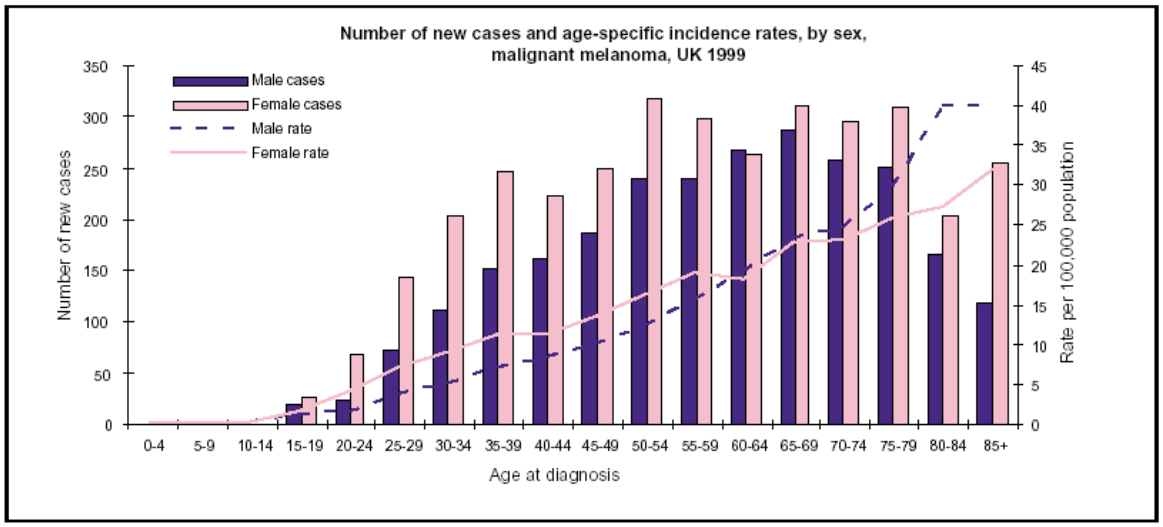
Now the diagnosis of metastatic melanoma carries a very poor prognosis indeed and is very rarely curable. However, there are reports that where there is an isolated metastatic site surgical resection does offer long term survival in some cases and you can see that to resect metastasis in the pregnant uterus would have very final consequences for the fetus. Finally there are reports of spontaneous regression for this condition, but that is a very rare event, almost certainly less than 1%.

So we entered into some lengthy discussions with our oncologists and we undertook an MRI scan of the whole of this patient from one end to the other and we did not identify any evidence of metastasis elsewhere. We asked our radiologist to undertake a biopsy, which was ultrasound guided. He obtained a biopsy result that was normal myometrium and this of course threw us into debate again because ones tendency when a biopsy result is normal tissue is to assume that the biopsy was inaccurate and to consider repeating it. However, there would be consequences of repeatedly putting a biopsy needle into a pregnant uterus. The individual who undertook the biopsy was absolutely certain he has put it into the right place and so we decided that we would accept the result, that this was not, in fact, a metastasis to the uterus. The other factor here was that this individual was very, very keen to continue with the pregnancy and really, I think, would have allowed her own health to deteriorate for the well being of her child. So, the pregnancy was allowed to continue and the baby actually grew well, but sadly she developed an inguinal mass at 25 weeks and underwent a block groin dissection, which showed two nodes positive.

The oncologists clearly then wanted to start to give some form of chemotherapy, but they were happy to delay this until fetal maturity. She in fact

EDITORIAL

delivered last week at 37 weeks, a normal healthy delivery of a boy and the placental histology is in fact negative. So the outlook for this particularly baby is probably very good, but I am afraid the outlook for the mother still remains at around 25% five years survival, even with the chemotherapy that she will be receiving.



This graph is to show you that the incidence of melanoma has been increasing in Britain and the UK. Possibly the downturn at the end of the graph just might reflect public health education on use of barrier creams for protection against the sun in those of us who have very low pigment levels in our skin, but we have yet to see.