

# 26 Pregnancy and melanoma (including hormone replacement therapy and oral contraceptives)

## 26.1 Naevi and pregnancy

Pregnancy increases melanocytic activity, causing hyperpigmentation as observed in the linea nigra, chloasma and areolar pigmentation. There is little evidence that significant changes in naevi occur during pregnancy.<sup>1–3</sup> It is therefore recommended that any naevus that changes during pregnancy and has other features suggestive of melanoma should be investigated. An excision biopsy can be performed safely using local anaesthetic during pregnancy with the obstetrician's and patient's consent.<sup>4</sup>

Evidence summary	Level	Reference
Naevi do not usually undergo significant changes during pregnancy	III–3	1–3

Recommendation	Grade
1. Any naevus that changes during pregnancy and/or has other features suggestive of melanoma be investigated	<b>C</b>

## 26.2 Melanoma and pregnancy

Melanoma is the most common malignancy in women of 25–29 years and internationally, it has been estimated that about 35% of women with melanoma are of child-bearing age.<sup>9</sup> Malignancy in pregnancy is reported in 1 in 1000 gestations, with malignant melanoma 8% of the total (1970s data).<sup>10</sup> Incidence of melanoma during pregnancy is estimated at 1 per 40,000 pregnancies<sup>11</sup> or 2.6 to 2.8 per 1000 pregnancies.<sup>9,12</sup>

Pregnancy does not increase the subsequent risk of having melanoma.<sup>13</sup> and there is no increased risk of melanoma developing during pregnancy.<sup>14</sup>

There is no significant difference in survival in pregnant patients diagnosed with melanoma or stage I disease.<sup>15–24</sup> The prognosis of pregnant women with melanoma is still dependent on tumour thickness and ulceration status.<sup>25</sup>

Pregnant women who present with regional or metastatic melanoma do not appear to have a worse prognosis.<sup>26,27</sup>

The effect of previous pregnancy on the prognosis of women subsequently diagnosed with melanoma is conflicting. One study showed previously pregnant women had a superior survival advantage (in particular those with stage I disease or women older than 50 years).<sup>28</sup> In another study there was a more favourable prognosis associated with five or more prior pregnancies.<sup>29</sup> Other studies showed no effect of prior pregnancy on the prognosis of melanoma in stage I disease.<sup>19,30,31</sup> But one study of stage II patients,<sup>30</sup> showed a significantly lower survival rate for pregnant patients and parous women who had experienced activation of the lesion in previous pregnancies.

There appears to be no effect of subsequent pregnancy on the prognosis of melanoma.<sup>15,19</sup>

Evidence summary	Level	Reference
There appears to be no relationship between pregnancy and risk of, or survival from melanoma	III-3	25

### Recommendation

	Grade
2. Melanoma in a pregnant woman be treated according to tumour thickness and ulceration, that is, as for a non-pregnant woman	<b>C</b>

## 26.3 Pregnancy after the diagnosis of melanoma

There are no standard, defined guidelines for patients who wish to become pregnant after the diagnosis and treatment of melanoma, but the consensus is to recommend that women avoid pregnancy for two to five years after the diagnosis of high-risk melanoma, whether or not the melanoma occurred during pregnancy,<sup>32</sup> as most recurrences are diagnosed within this period. Those with < 0.5mm thick melanoma have a 1–3% risk of recurrence within five years, while those with > 4mm thick melanoma have a risk of recurrence of up to 50% within two years. However, it is not completely predictable who will develop recurrent disease and each patient should be approached individually, with the patient ultimately making her own informed decision.<sup>33</sup>

### Recommendation

	Grade
3. Women of childbearing age who are within five years of primary treatment of a high risk melanoma should be fully informed of their prognosis when considering pregnancy	<b>C</b>

## 26.4 Treatment of melanoma during pregnancy

The treatment of primary melanoma does not differ because a woman is pregnant. The status of the sentinel node is one of the most important prognostic indicators for patients with clinically localised melanoma.<sup>34</sup> Lymphoscintigraphy is probably

safe in pregnant women<sup>5-8</sup> and they may be offered a SNB using technetium after careful counselling about the safety and efficacy of this procedure.<sup>35</sup> The use of the patent blue V dye does have a 1% risk of an allergic reaction. Its safety in pregnancy is unknown. Its use is therefore not recommended in SNB in pregnant women. The timing of the surgery is important: near term, the clinician would probably defer treatment until after delivery, but if the melanoma is diagnosed in the first or second trimester the decision is more difficult.

These patients and pregnant patients with metastatic melanoma should probably be treated in the setting of a comprehensive cancer centre.

Evidence summary	Level	Reference
Sentinel node biopsy is safe using technetium only in pregnant women.	III-3	5-8

### Recommendations

	Grade
4. Sentinel node biopsy can be performed using only technetium in pregnant women	<b>B</b>
5. Pregnant women with thicker melanomas and nodal metastases be treated in consultation with specialised centres	<b>C</b>

## 26.5 Melanoma and hormone replacement therapy and the oral contraceptive pill

There is no convincing evidence that either hormone replacement therapy (HRT) or the use of the oral contraceptive pill (OCP) affects the natural history of melanoma.<sup>32,36-53</sup>

Age at menarche, age at menopause, or duration of menstrual life does not affect melanoma risk.<sup>32,37-40,46</sup>

Evidence summary	Level	Reference
The use of HRT or OCP does not affect the natural history of melanoma	III-3	32, 37-53
Age at menarche, age at menopause, or duration of menstrual life does not affect melanoma risk	III-3	32, 37-40, 46

### Recommendation

	Grade
6. Hormone replacement therapy and oral contraceptives are not contraindicated in women who have had melanoma	<b>C</b>

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