



## **Skin Care, Hair Care and Cosmetic Treatments in Pregnancy and Breastfeeding**

Information in this leaflet is general in nature and should not take the place of advice from your health care provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect.

### **Issues for pregnancy**

Many pregnant women have skin and hair concerns just as they did before pregnancy. Sometimes conditions such as acne actually worsen during pregnancy because of hormonal changes and often women notice darkening of their skin (melasma). However, due to concern about potentially hazardous exposures to their unborn babies, pregnant women are often uncertain about which products are safe for them to use.

Generally cosmetic treatments are discretionary (not medically necessary) and if safety is uncertain, women should consider whether the product or treatment is really required. There are several considerations when evaluating whether a specific skin or hair product is unsafe in pregnancy. Firstly, the active ingredient in the product needs to be considered unsafe. Secondly, it also has to be able to reach the unborn baby in its mother's womb by inhalation or absorption through the mother's skin (**topical application**). Although there is often limited information about the actual safety of specific ingredients in skin products during pregnancy, if it is known that skin absorption is minimal then the exposure to the unborn baby is generally insignificant and the product or treatment is regarded as safe. Below is a summary of current advice.

### **Cosmetics, Moisturisers and other Skin Care Products**

Cosmetics and over the counter skin products generally contain ingredients that are unlikely to be harmful in pregnancy as they are used by applying to the skin (rather than swallowing a tablet). Benzoyl peroxide, salicylic acid and glycolic acid are ingredients found in many acne treatments and cosmetics. They are considered to be safe to use in pregnancy.<sup>1</sup>

**Hydroquinone**, an over the counter skin product for skin bleaching absorbs through skin in larger amounts and therefore should be avoided while pregnant.<sup>1</sup>**Minoxidil** for hair growth or **retinoin** for acne are skin products requiring a prescription and should also not be used.<sup>2</sup>

There has also been concern over use of vitamin A in pregnancy. However, these concerns are associated with amounts of vitamin A taken by mouth in large doses. Vitamin A that is present in cosmetics is generally in insignificant quantities and is minimally absorbed through the skin.<sup>2</sup>It is therefore acceptable to use over the counter skin products that contain vitamin A.

Unbranded products, particularly if sourced over the internet, are not recommended as the actual ingredients cannot be verified.

### **Hair removal creams and bleaching agents**

Hair removal creams usually contain a product called thioglycolic acid. Although there is no specific data on its absorption, because the concentration of the chemical is low and the time applied to the skin is short, it would not be anticipated to be harmful in pregnancy.<sup>1</sup> The creams may also contain low levels of the chemicals, sodium and calcium hydroxide. These chemicals form a normal part of dietary intake and use on the skin would not be expected to cause any alteration to levels in the body. Therefore, hair removal creams are safe to use in pregnancy.

Agents such as hydrogen peroxide are used for hair bleaching. Because they are generally applied for short periods and in low concentrations, they would not be considered a significant exposure.<sup>1</sup> However, products with hydroquinone should be avoided.

### **Sunscreens**

Sunscreens contain various ingredients including oxybenzone, octocrylene and octisalate. Absorption through the skin is generally minimal and as a result, sunscreens do not pose a risk to pregnant and breastfeeding women.<sup>1</sup> Using sunscreen is advisable as it is just as important to avoid sunburn in pregnancy and while breastfeeding as it is at other stages of life.

### **Hair and nails**

Many pregnant women express concern about chemical exposure from various treatments such as hair colouring and hair straightening. However, it is considered that the actual exposure to an unborn baby is minimal because hair dyes and other treatments are applied to the hair and scalp (as opposed to swallowing the chemicals). Furthermore, treating hair is common in pregnant women and no harmful outcomes have been noted. Pregnant women can therefore safely have their hair done during pregnancy without putting their unborn baby at increased risk.<sup>3</sup>

Women may have concerns about having their nails done during pregnancy. This is due to concern regarding chemical and dust exposure via inhalation or through the skin. However, because exposure is for a relatively brief period, it is not anticipated that any nail work would cause problems in pregnancy or breastfeeding.

Hairdressers and nail salon workers are exposed to chemicals for longer periods of time. Most studies have shown no increased risk of birth defects or any other pregnancy complications. However, it is important to minimise chemical exposure by general occupational health and safety measures. These measures include maximising ventilation of work areas, using gloves, washing hands before eating and practising safe storage and disposal of chemicals. Most available masks do not prevent inhalation of chemicals although they may prevent inhalation of dust particles.<sup>4</sup>

### **Tanning products**

Self-tanning involves artificially tanning the skin by applying products containing dihydroxyacetone in cream or gel form in varying concentrations. It is thought that absorption via the skin is very low and it is therefore considered safe in pregnant women. For spray tanning (which also uses dihydroxyacetone but in higher concentrations), it is advisable to use protective measures such as nose plugs or masks to avoid excess inhalation. This is particularly important for women who are exposed occupationally.<sup>5</sup>

### **Botox**

Botulinum toxin is used medically for treatment of conditions related to muscle spasm, although it is used more commonly for cosmetic treatment of facial wrinkles. There is minimal research regarding its use in pregnancy, but small doses of botox injected into a muscle are unlikely to enter the circulation. Furthermore, it does not cross the placenta so even if used, it is unlikely to be able to reach an unborn baby. As such, inadvertent exposure would not be a cause for concern. Nonetheless, botox for cosmetic reasons is not medically necessary so its use cannot be recommended during pregnancy.<sup>6</sup>

### **Laser**

Laser treatment is most commonly used for hair removal. The laser is a light that heats the surface of the skin only. It does not penetrate beyond the skin and thus poses no risk to an unborn baby during pregnancy.<sup>7</sup>

### **Breastfeeding**

Cosmetics, skincare products, sunscreen and hair removal or bleaching creams are generally considered safe to use while breastfeeding. However, hydroquinone should be avoided as the absorption is high. It is also safe to have any hair, nail or tanning treatments. Nonetheless, breastfeeding women should avoid application of spray tan to the nipple and areola of their breast as this comes into direct contact with their baby.<sup>5</sup> Botox if injected properly should not enter breastmilk. However, as there is no research in breastfeeding mothers, its use for cosmetic purposes would not be recommended.<sup>8</sup> Laser treatment is considered safe while breastfeeding.

### **References**

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