



Enormous changes occur in a woman's body during pregnancy, and the skin is not exempt. These changes range from the hardly noticeable right through to the uncomfortable and even the serious. But every new mother who holds her healthy baby would probably say all the physical travails are worth it; in addition, most skin changes return to normal by the time the new baby is learning to crawl.

▪ CHANGES IN COLOR

HYPERPIGMENTATION

The darkening of the skin known as hyperpigmentation is one of the most common skin changes that occurs during pregnancy. It usually affects only areas of skin that already have a great deal of pigment, such as the nipples and the areola that surrounds the nipples, the armpits, and the genital area.

Fully 90 percent of all pregnant women experience some pigment changes in these areas. This applies to women of all races and skin types. In rare instances, skin may darken all over the body. Such widespread hyperpig-

mentation may be the result of a specific hormonal problem, so check with your doctor if you notice this happening.

It is thought that hyperpigmentation is common in pregnancy because estrogen and maybe even progesterone stimulate pigment production by the melanocytes. Since birth control pills contain some of these hormones, women taking oral contraceptives may also experience some degree of hyperpigmentation.

THE LINEA NIGRA

The linea nigra is a dark line of skin that develops from the pubic area to the lower chest area, bisecting the abdomen externally, as the backbone might be said to bisect the back internally. From the Latin meaning “dark line,” the linea nigra in almost all cases vanishes soon after the baby has been delivered.

MELASMA

Three out of four pregnant women develop a skin condition called melasma. Known also as chloasma or the “mask of pregnancy,” melasma affects the cheeks primarily but can occur on the forehead, upper lips, and chin. The skin in these areas darkens and takes on a masklike quality. While the actual cause of melasma has yet to be determined, it’s clear that its occurrence has a great deal to do with hormonal fluctuations. Women who are not pregnant but who are taking birth control pills may also have to cope with melasma, which is additional proof that levels of estrogen and progesterone in the blood have a great effect on the skin.

If you have an olive-toned complexion, you are more likely to develop melasma during a pregnancy. If your melasma is very noticeable, you may want to try a bleaching cream to minimize it. Although it is considered safe to use during pregnancy, my rule of thumb is don’t try to rock the boat in the middle of the storm. After pregnancy, the stimulating causes of melasma will subside and any therapy you start will be easier. This rule certainly applies to Retin-A, which might be helpful in the management of melasma but in my opinion should not be used during pregnancy.

Most pregnant women are perfectly happy to forgo anything that might endanger their pregnancy or their baby when it comes to the appearance of their skin.

MINIMIZING MELASMA

- Use sunscreen. Ultraviolet radiation will make the pigmentation worse.
- Start with hydrocortisone cream 1% applied twice a day. It is safe to use on the face.
- Discuss with your doctor a regimen that includes Retin-A and/or hydroquinone 4%. Several brands are available, including some that have sunscreen. (Note: some people are sensitive to hydroquinone bleaching cream. Do a test spot on your inner arm for three or four days to make sure you don't develop a rash.)

Follow your regimen for at least two months before expecting to see results.

It's afterward that the concern begins. Once your baby is born, and you're living through those exhausting first months and years, you can begin to worry about what to do about your hard-earned mask of pregnancy. If you're nursing, you may or may not want to apply Retin-A, even though this is probably a low-risk choice in terms of how the topical application will affect your breast milk.

The bad news is that melasma can linger for months or years after it first develops. While no specific treatment can cure melasma, topical regimens can be helpful. A few patients do respond to the ruby laser. The success rate is generally low, however, and many treatments are needed. Moreover, the people in whom melasma is the biggest problem—that is, those with darker skin—run additional risks of side effects with the ruby laser because it can lead to the loss of underlying normal skin pigment making the previously dark area appear blotchy and irregular.

▪ STRETCH MARKS

Stretch marks, known officially as *striae gravidarum*, occur during pregnancy due to the slow but steady stretching of the skin's elastin fibers. Usually they become noticeable only during the third trimester, though some pregnant women notice them almost right away. Stretch marks occur most frequently on the breasts, abdomen, hips, and buttocks. It's estimated that almost 90 percent of pregnant women will have stretch marks.

Darkly pigmented women will notice the stretch mark gradually fade to a lighter and lighter shade, while white women of various ethnicities will notice a pinkish line indicating the beginning of a stretch mark. After

childbirth, the skin where a stretch mark has formed will never fully recover to its original appearance; instead, it will always remain somewhat thinned out and noticeable—almost like a scar.

Retin-A may be helpful in minimizing stretch marks after the baby is born. Some of my patients also report that topical application of vitamin E helps, and I don't discourage its use. You will also hear, on prepackaged local-television news spots, that lasers cure stretch marks. Lasers can remove the redness, but the redness will often fade on its own. As far as narrowing the width of the stretch marks or thickening the thinned skin, the verdict isn't in yet. Remember, not all medical "breakthroughs" reported in the media have been confirmed scientifically. In general, when it comes to medicine, what applies in the rest of life holds as well: If it sounds too good to be true, it probably isn't true.

Whatever you decide to do, I advise waiting until after your healthy baby is born and you've stopped breast-feeding.

▪ BLOOD VESSELS

Pregnancy can wreak as much havoc on your outer skin as it can on your blood vessels. This is inevitable because as your circulatory system adapts to meet the needs of two instead of one, your blood vessels have to expand rapidly. (It's a bit like expanding the household overnight.) Major side effects of this great blood vessel expansion are varicose veins and spider nevi.

VARICOSE VEINS

Many women who have never had varicose veins develop them during pregnancy, due to the rapid and necessary growth of blood vessels and the increased fluid volume their bodies are carrying. Women who have suffered varicose veins already may find them worsening with each pregnancy. Varicose or dilated veins usually appear in the legs and can be superficial or deep.

Varicose veins may look like slightly raised blue lines or wavy red lines. Sometimes they are closely grouped in what is called a star-burst pattern. While these are superficial veins, they will likely persist after pregnancy.

The treatment of choice for superficial varicose veins is called sclerotherapy (see chapter 17, "Veins or Vanity") though laser is an option that

is pursued more frequently. Results to date are not as predictable as with sclerotherapy.

SPIDER VEINS

Spider veins can appear anywhere on the body, but they are most common on the arms, neck, and face. Most vanish within two months after delivery, but about 25 percent persist. For those that don't resolve after pregnancy (give it some time), laser treatment is now an excellent option. A fair number of patients come for treatment and tell me that the particular red spot they are concerned about came up during pregnancy three years earlier and has not resolved. Women are usually satisfied with this treatment, even though it often takes two or more laser sessions to completely eliminate the growth.

HEMANGIOMAS

Hemangiomas are tightly packed balls of tiny blood vessels that form bright red bumps, usually dome-shaped and no bigger than the tip of a lead pencil. Although they are quite red, they do not bleed. A pregnant woman may develop anywhere from a few to a hundred hemangiomas, and these may grow bigger during the pregnancy. Most of them vanish after birth of the baby, but if they persist they can be removed by laser therapy or can be cauterized.

RED PALMS

The red palms of pregnancy (palmar erythema) affect more than 60 percent of white pregnant women. Only 35 percent of black women experience the condition. Palms may be pinkish or bright red, sometimes accompanied by a blue tinge. By the third trimester, the color of the palms is more pronounced. This condition is not related to pigmentation changes, as commonly thought, but rather is caused by changes in blood flow through the blood vessels. Palms return to normal once the baby is born.

▪ SKIN GLANDS

The stimulation of both sweat and oil glands goes way up when you're pregnant. You can guess what happens. You sweat more, and if you are

prone to acne, you may break out more. The only treatment that is considered safe for acne flares during pregnancy is topical erythromycin.

Eccrine, or sweat glands, are needed to regulate the body's temperature. Particularly in the last trimester of pregnancy, eccrine activity increases dramatically. This may be why women who give birth in the winter can walk around comfortably in only a sweater, and why we pity the expectant mother who's due in August as she sweats and sweats. Sweating a lot may be uncomfortable in summer months, but it is not dangerous. One side effect of this increase in sweat production is that a pregnant woman may develop *miliaria*, which are minute whiteheads on the skin triggered by the plugging of sweat glands.

Sebaceous glands, or oil glands, also increase their activity during pregnancy, once again particularly in the last trimester. In addition, a specific group of glands on the skin of the breasts enlarge during the first few months of pregnancy and almost always form small bumps in the nipple area.

▪ CHANGES IN HAIR AND NAILS

Not only does pregnancy affect every layer of the skin, it also affects your hair and nails.

HAIR

Hair goes through many changes when you're pregnant—some good, some not so good.

Women who say their hair feels thicker during pregnancy are not exactly right, but they're close. The number of hairs that are actually growing at any given time increases during pregnancy, due to hormonal changes. In addition, the hair sheds less. So, it's not true that the hair becomes thicker, there is simply more of it, giving it a thicker, more luxurious texture. This phase of hair growth is called anagen and continues throughout pregnancy. Then the next phase in the hair growth cycle, telogen, begins, and the reverse situation occurs, as the postpartum woman begins to shed more than she ever has before. In this phase of the hair growth cycle, hairs are in a resting pattern. Thus, as the anagen hairs fall out, they are not



Sweat glands
embedded in skin

replaced. The thinning of hair after pregnancy is called *telogen effluvium*. It usually lasts for a couple of months as the natural growing and resting cycle of hair growth re-regulates itself.

In a small number of women, thinner hair may be a permanent effect of pregnancy. Until recently, there was not a lot to be done for such hair loss. Now, however, Rogaine, the brand name for minoxidil, is available over-the-counter and has been proven to stimulate modest hair growth. Wait until you are finished breast-feeding before using any elective medication.

Hirsutism, also known as excess body hair, can develop when a woman isn't pregnant, but the increase in and fluctuation of estrogen and other hormonal levels during pregnancy can contribute to it. Usually, the increase in hair growth is mild.

NAILS

The increase in hormone production during pregnancy stimulates nail growth, and during the last months of pregnancy, nails grow particularly quickly. In addition to an increased growth rate, pregnancy may affect your nails in a number of other ways.

The irregular production of keratin during pregnancy (sometimes there's more and other times less) causes nail ridges. *Transverse grooving* refers to the new horizontal lines or furrows you may notice running across the width of your nails. *Distal onycholysis* is the splitting that may occur at the tips of your nails, resulting in V-shaped nicks. Dead skin may also develop underneath your nails during pregnancy in a condition called *subungual hyperkeratosis*.

Nail problems are difficult for dermatologists to treat at any time. Unless problems with your nails during pregnancy are particularly bothersome, they're best left alone until after the baby is born.

■ OF MOLES, WARTS, SKIN TAGS, ■ COLD SORES, ET AL.

Many preexisting skin conditions may worsen during pregnancy. *Cold sores or fever blisters* are caused by the herpes virus, which most often breaks out on the lips. During pregnancy, however, herpes virus infection may occur in other areas of the body if it was previously contracted there.

A prime example is genital herpes, which can extend to the anal area. If you experience an outbreak of genital herpes near the time of your due date, your doctor will likely schedule you for a Cesarean-section delivery.

Moles, or nevi, tend to increase in size during pregnancy and can darken in color. New moles may also appear. In most cases, these changes are natural and benign, and the moles will return to their original size and color after childbirth. If you notice, however, that other changes accompany the growth of an existing mole or the appearance of a new mole, such as redness around the area or a raised appearance, consult your physician. (See chapter 22, “Melanoma.”)

Freckles and age spots (liver spots) also tend to grow and change color during pregnancy. Once again, these changes are normal and present no danger.

Skin tags can multiply during pregnancy. These occur most frequently on the neck, under the arms, and in the groin area. The theory is that they are spawned by excess friction. My guess is that they are also affected by the increase in a whole host of hormones that have a growth-stimulating effect. People who are overweight tend to have more skin tags than those of normal weight.

While skin tags may be annoying, they are harmless. If they remain after you give birth, they can be easily removed by your dermatologist by lifting them with a forceps and snipping the small stalk that attaches them to the skin. This procedure is so quick that local anesthetic isn't even required in most cases.

Preexisting warts can also grow larger during pregnancy. Whether pregnancy encourages new warts to appear is still not clear. If you have genital warts and they increase significantly in size, a Cesarean delivery will be indicated. Plantar warts—those that appear on the soles—can increase in size and become painful. In this case, there are topical treatments that are safe and effective to use during pregnancy.

▪ SKIN CONDITIONS UNIQUE TO PREGNANCY

DERMATITIS

Certain rashes occur only during pregnancy. Most look like common dermatitis. Many of them mimic acne. Some mimic herpes conditions. Many forms of dermatitis are common only to pregnancy, and most appear

as small, itchy, red bumps that are easily treated with topical corticosteroids. The most common eruption of pregnancy is PUPPP, which is short for Pruritic Urticarial Papules and Plaques of Pregnancy. These bumps, which usually develop in the third trimester, subside within weeks of delivery, but during pregnancy they typically respond well to topical steroids.

Another variety, *autoimmune progesterone dermatitis*, is caused by higher than normal levels of progesterone in the system. It is characterized by acnelike blemishes on the extremities and buttocks.

ITCHING

Itching, or *pruritus gravidarum*, makes you feel itchy everywhere. For pregnant women who experience this mild condition it is usually at its worst during the last trimester. The one plus to pruritus gravidarum is that it is invisible—there is no obvious rash. The itching is thought to be caused by the backup of bile in the bile ducts which can occur during pregnancy.

AN IMMUNIZATION WARNING

If you are thinking of becoming pregnant and know that you have never had rubella, or German measles, your doctor will recommend a rubella vaccination. It's important to be vaccinated, since rubella can cause severe birth defects or miscarriage.