STRETCH MARKS PREVENTION AND TREATMENT



Learn What Exactly Are Stretch Marks And How Can They Be Treated.

Legal disclaimer: The content of this book is only for general awareness on stretch marks. Consult a qualified doctor in case of any condition requiring medical attention. Since some external applications may cause allergic reactions on the skin, self-medication should be avoided.

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INTRODUCTION

Each and every person may get stretch marks irrespective of age, sex, general health, life situation etc. However, these factors can make a favorable situation for stretch marks in many cases. Stretch marks appear as a result of excessive stretching of the skin for a prolonged period of time, which in turn, results in the rupture of collagen fibers in the skin. This causes cosmetic problems due to the appearance of pinkish or silvery white lines in different parts of the body.

Beauty-consciousness is an innate weakness of man. Hence, most of us leave no stone unturned in improving our looks. The skin is considered the mirror of the human body and reflects the physical, mental and emotional status of every individual. Therefore, the care of skin naturally assumes utmost significance in beauty care.

The number of people attending beauty clinics and dermatology departments is increasing day by day. Even though skin diseases have a negligible mortality rate, most people are worried about skin problems on account of the social stigma. A person with a disease involving an internal organ may not be as worried as another suffering from a skin ailment in view of the simple reason that everyone can expressly notice the change in the latter in the form of a distortion or plain ugliness.

STRUCTURE OF THE SKIN

The skin has three layers - The outer layer called the epidermis, the inner one called the hypodermis and the dermis in between these two. The epidermis is made up of keratinocytes and melanocytes. The dermis contains fibers made up of proteins such as collagen and elastin with a gel like ground substance to fill the gap between the protein fibers. The inner hypodermis contains fat and connective tissues with blood vessels and nerves.

Collagen: It is a structural protein that forms 80% of connective tissues. It acts as a cementing substance between body cells. The rate of tissue repair depends on the production of collagen. Conditions that hamper collagen formation can delay wound healing.

Elastin: It is also a protein that maintains the elasticity of the skin. Along with collagen and glycosaminoglycans it forms the connective tissue.

The human skin has got several functions such as protection, heat regulation, water balance, excretion etc. It supports the deep body structures and is capable of

stretching to some extent due to the presence of elastic protein fibers in the dermis. But too fast enlargement of the body parts cause excessive stretching of the skin, resulting in the breaking of collagen and elastin fibers of the dermis. This causes a slightly depressed discoloration called stria atrophia or stretch marks. Initially these marks are slightly pinkish and later become white or silvery in appearance.

FACTORS AFFECTING THE SKIN

Certain factors are closely related with the quality of the skin. The color of the skin changes according to racial and genetic factors. A healthy skin should be elastic and free from excess dryness. It should be free from lesions such as eruptions, macules, papules, vesicles, pustules etc.

The following factors are closely related with the quality of skin.

- Hereditary factors
- Environmental factors
- Food intake
- Nutrition
- Water intake
- General health
- Sensitivity towards external factors
- Self care
- Hygiene
- Mental and emotional status
- Occupation
- Life style

SYNONYMS

Different terms are used to denote stretch marks.

- Striae atrophicae.
- Vergetures.
- Striae cutis distensae.
- Stria gravidarum (stretch marks during pregnancy).
- Lineae atrophicae.
- Striae distensae.
- Linea labicante.

SOME MYTHS ABOUT STRETCH MARKS

- Only women are affected by stretch marks.
- Only obese and pregnant ladies get stretch marks.
- They persist forever.
- They increase with time.
- They spread allover the body.
- Stretch marks indicate ill health.
- They indicate loss of physical beauty.
- They can progress to leucoderma.
- They are contagious.

SOME FACTS ABOUT STRETCH MARKS

- 1. Both sexes are affected by stretch marks.
- 2. People in both extremes of life are affected.
- 3. Both obese and slim people get stretch marks.
- 4. 70% of teenage girls get stretch marks.
- 5. 90% of pregnant ladies get stretch marks.
- 6. Stretch marks may persist for a long time but become less noticeable later.
- 7. Regular exercise prevents stretch marks, whereas vigorous exercise and bodybuilding can result in stretch marks.
- 8. Modern treatment methods are effective, but expensive.
- 9. Chemical peeling and laser therapy may cause pain and scarring.
- 10. Natural methods are cheap and free from side effects.

HOW STRETCH MARKS ARE FORMED

Stretch marks are slightly depressed linear marks with varying length and breath found on certain parts of the body in conditions like pregnancy, obesity, puberty etc due to the excessive stretching of skin for a long period.

It has already been mentioned that the quality and strength of the skin depends on certain factors like general health, nutrition, hydration, hereditary factors, environmental conditions, hygiene, healthcare, skin care etc. A healthy skin can be stretched to some extent especially when the enlargement of skin is gradual. But when the body surface area increases in a short span of time there will be excessive stretching of the skin resulting in breaking of collagen and elastin present in the dermis.

When these protein fibers break, some kind of itching may be felt, but no pain. Along with breaking of fibers there will be dilatation of small blood vessels present in the skin, which results in red or purple stretch marks called stria rubra. Later, with the advancement of time there will be remodeling of skin with loss of melanin in the affected area and this causes them to become pale and silvery white in color. Now it is called stria alba. However in such cases they may appear as faint pale markings.

The length of stretch marks may vary and their average width is 1 to 10 mm. They are seen parallel to each other and make an angle of 90° with the direction of stretching of skin. These markings are actually formed in the deep tissues of the skin and gradually they appear on the skin surface. The usual sites are abdomen, buttocks, breasts, thighs, shoulders etc.

PREDISPOSING FACTORS FOR STRETCH MARKS

Stretch marks are a usual woe among people who are conscious about their skin beauty. We know that, they are formed due to the rupture of collagen and elastin fibers on account of the excessive stretching of the skin. They initially appear in areas like abdomen, breasts, and thighs as pinkish linear markings and later become silvery white depressed lines and gradually fade with time. In dark complexioned people they are seen as white and in light complexioned people, as pink bands of varying length and breadth.

The appearance of stretch marks is predisposed by certain factors

- 1. **Type of skin:** Dry skinned people are more prone to stretch marks whereas oily skinned people are less affected.
- 2. **General health:** Deterioration of general health can result in the loss of strength and elasticity of skin.
- 3. **Nutrition:** Nutrients like proteins, vitamins, iron and zinc are essential for the skin and their deficiency may lead to the formation of stretch marks.

- 4. **Hydration:** Adequate intake of water is very essential for the elasticity and softness of skin. Less water in take makes the skin dry that results in stretch marks.
- 5. **Environmental factors:** Climatic changes can influence the integrity of the skin.
- 6. **Hereditary factors:** Stretch marks can be a familial problem in certain cases. Ladies having this problem usually give a history of the same in their mother.
- 7. **Food intake:** Those who take excess of fatty food are prone for this condition due to sudden weight gain.
- 8. **Exercise:** Lack of regular exercise can increase fat deposition and reduce the tone of muscles, both of which result in stretch marks. However rigorous exercises can result in this condition as in the case of body builders.
- 9. **Medicines:** Excess intake of steroid drugs and use of steroid ointments can predispose stretch marks
- 10. **Occupation:** Over work can predispose stretch marks.
- 11. **Miscellaneous causes:** Use of tobacco, alcohol, malnutrition, stress, diabetes etc can also be contributory factors. Caffeine, an alkaloid present in coffee can increase the chance for stretch marks.

CONDITIONS CAUSING STRETCH MARKS

Rapid enlargement of the body causes stretching of the skin with the breaking of collagen and elastin fibers. Hence stretch marks are commonly found in areas of the body such as abdomen, breasts, thighs, buttocks, shoulders etc. Even though stretching is the main cause, certain hormones also have some role in their development.

The following are some common causes.

1. **Pregnancy:** During pregnancy there will be stretching of the anterior abdominal wall to accommodate the enlarging uterus. During the second half of pregnancy pinkish stretch marks start appearing on either side of the lower abdomen and later on become silvery white.

- 2. **Obesity:** Sudden weight gain due to excessive fat deposition can stretch the skin to develop stretch marks.
- 3. **Puberty:** During puberty both sexes will have increase in fat deposition and body surface area that are due to hormonal activity, which results in stretch marks. Compared to boys, fat deposition is more in girls and hence they are found more among girls during puberty.
- 4. **Cushing's syndrome:** This is an endocrine disease due to the hypo-secretion of adrenal hormones. Here there will be obesity with marked stretch marks.
- 5. **Bodybuilding:** Stretching of the skin due to excess of physical activity is the main cause here. Bodybuilding causes sudden enlargement of muscle size resulting in more stretch marks. The common sites are shoulders, thighs, deltoid region, gluteal region etc.
- 6. **Medicines:** Frequent use of steroid medicines and topical steroid creams can result in stretch marks. Topical drugs can cause insufficient production of collagen and elastin resulting in the weakness of skin.
- 7. **Edema:** Edema is the collection of fluid in the intercellular space. This can occur anywhere in the body. Prolonged edema due to kidney and liver diseases can stretch the abdomen and cause stretch marks.
- 8. **Weight loss:** Both rapid weight gain and rapid weight loss can cause the development stretch marks.
- 9. **Miscellaneous:** All conditions that hamper collagen synthesis result in stretch marks.

WHERE STRETCH MARKS ARE FOUND

Stretch marks are found in conditions like pregnancy, puberty, obesity etc. and are usually seen in areas like abdomen, thighs, breasts, buttocks, shoulders etc.

1. **Abdomen:** Abdomen is mainly affected during pregnancy. In obese individuals excess fat deposition in the abdominal wall can also result in stretch marks. Ascites is a condition wherein excess of fluid is collected in the peritoneal cavity due to different causes, which stretch the abdominal wall. Similarly, any large lump or tumor in the abdomen can also cause stretching of skin.

- 2. **Thighs:** Seen mainly in weight lifters and body builders. Obesity and puberty also cause stretch marks in this region.
- 3. **Breasts:** Enlargement of breasts is one of the secondary sexual characters in females. During puberty stretch marks may appear on breasts that will be doubled by obesity. However stretch marks are more common during pregnancy due to enlargement and engorgement of the breasts. Stretch marks become more prominent when the breasts become pendulous or sagged with the advancement of age.
- 4. **Buttocks:** Stretch marks appear here mainly during puberty. Girls are more affected than boys due to the development of typical feminine structure. Fat deposition is more in this area. Exercise and obesity affect both sexes equally.
- 5. **Shoulders:** Here stretch marks are mainly due to exercise and hypertrophy of shoulder muscles. Deltoid region is mainly affected.
- 6. **Other sites:** Swellings due to conditions like fat deposition, tumors or edema can result in stretch marks in any part of the body. Lymph edema is due to the obstruction of flow of lymph, which causes stretch marks mainly in the extremities.

Once these marks appear, certain time is required for them to be less prominent.

HOW STRETCH MARKS AFFECT YOU

Both sexes can be the victims of stretch marks but mostly women are psychologically affected due to their beauty consciousness. Stretch marks may cause mental trauma leading to depression in many sensitive people. It affects their self-esteem and many develop negative thoughts. On the other hand there are women who are least bothered about them and regard them as a badge of mother hood. Still, the number of people visiting clinics to remove stretch marks is increasing day by day.

Many people say that they are disappointed by the doctor's advice. Some doctors advise their patients, not to bother about stretch marks. Doctors, other than dermatologists or cosmetologists, usually ignore stretch marks, as they give more importance to vital organs and other functions of the body. Even though stretch marks are self-limiting to some extent, proper treatment along with advice and moral support aid the sufferers.

Because of the increasing need for the treatment modalities, there are a number of products in the market to deal with stretch marks. But most of these products have not been proved effective scientifically but a few of them yield results in many cases. Modern treatment methods like plastic surgery, laser therapy have been proved effective even in long standing cases. Statistics show that people are increasingly using their money and time to get rid of stretch marks.

PREGNANCY AND STRETCH MARKS

Weight gain, stretching of skin, edema, lack of activities, fat deposition and hormonal changes are the responsible factors during pregnancy. Striae gravidarum is the medical term for stretch marks in a pregnant lady. These are predominantly found in the abdominal wall below the umbilical region. Breasts are also engorged in pregnancy. Initially these lines are pinkish and later on become silvery white. In multipara both pink and silver white lines are seen. Apart from stretching, the rise in the aldosterone level during pregnancy is also responsible.

In order to prevent stretch marks on the breasts, a special bra called supportive maternity bra should be used throughout pregnancy and lactation period. Massaging with some natural substances like olive oil, lavender oil, jojoba oil etc can be helpful to prevent stretch marks. However, Retin ointments should not be used during pregnancy and lactation due to some ill effects. The diet should be balanced and should provide all nutrients required for the mother and the growing fetus. Excess of fatty diet should be avoided. Apart from all nutrients a pregnant lady should take sufficient quantity of water. Above all, anxiety should be avoided regarding all pregnancy related complaints including stretch marks.

HOW EXERCISE IS RELATED WITH STRETCH MARKS

- Exercise helps to maintain the muscle tone, which prevents excessive stretching of skin.
- Regular exercise prevents excess of fat deposition.
- Blood circulation and lymphatic flow are maintained by exercise.

- Exercise also helps maintain elasticity of skin and removal of waste products from the skin.
- However rigorous exercise can cause excessive stretching of skin.

HOW DIET IS RELATED WITH STRETCH MARKS

Almost all nutrients are essential for a healthy skin. Among nutrients, proteins vitamins and zinc are more important as far as tissue repair is concerned.

Proteins: These are the essential constituents of body cells. Basically proteins are made of amino acids which, by a process called protein synthesis, combine together and form different structural proteins of the body. For the purpose of tissue repair, proteins like collagen and elastin have to be synthesized in the skin. Any conditions which hamper protein synthesis and tissue repair predispose stretch marks and delay wound healing.

Vitamin A: Helps to promote skin growth and tissue repair. It can prevent scaling and drying of skin. Collagen production is greatly influenced by this vitamin. All these functions help to prevent stretch marks.

Vitamin C: This vitamin is essential for the formation of collagen; in other words, it is a must for the process of wound healing and tissue repair. The integrity of blood vessels is also influenced by vitamin C.

Vitamin E: This vitamin is an antioxidant that protects the skin. Its main role is the maintenance of normal body metabolism, healing and tissue repair.

Zinc: It is essential for the production of collagen that prevents stretch marks.

A balanced diet according to certain factors like age, occupation, general health, any diseases like diabetes etc. should be considered to maintain all functions of the body in a normal way.

ROLE OF HORMONES IN THE DEVELOPMENT OF STRETCH MARKS

It is a known fact that certain hormones are involved in the formation of stretch marks. Almost all conditions causing stretch marks show a change in the hormonal levels. Among hormones, glucocorticoids are having direct link with stretch marks as these hormones hamper collagen synthesis.

The following conditions show some hormonal changes.

- 1. Puberty
- 2. Pregnancy
- 3. Obesity
- 4. Emaciation
- 5. Stress
- 6. Depression
- 7. Hormone therapy
- 8. Environmental changes
- 9. Cushing's syndrome
- 10. Steroid injection among body builders and athletes.

HOW MIND IS RELATED WITH STRETCH MARKS

The skin is the mirror of the body. Any imbalance of the body will be reflected on the skin in different ways. There are many psychosomatic disorders affecting the skin such as lichen planus, psoriasis, leucoderma etc., all of which indicate the powerful link between the body and the mind. Stress and strain in life can change the hormonal levels in the body. It also affects the food intake and assimilation. Apart from all these, a stressed individual may neglect personal care and create health related problems.

HOW TO MANAGE STRETCH MARKS

Since stretch marks are common among many people there are a number of treatment modalities to be applied. The most important factor is the selection of the suitable method on the basis of the severity of the condition. Even though it is not a life threatening condition, many people need treatment because of social stigma. In majority of cases stretch marks remain for a long time. There are some natural and modern methods to deal with stretch marks. The effect of treatment depends upon age, skin tone, general health, nutritional status and most importantly, the stage of stretch marks. When the treatment is given initially the result will be better; if delayed, then the result may not be good.

1. External applications:

Topical creams and moisturizers, skin firming agents and skin hydrators are available in different trade names but they give fewer results in long standing cases; however the following topical agents are widely used with varying results.

Topical agents are supposed to promote collagen synthesis when applied on the affected skin.

- Topical retinoid therapy (retin A treatment)
 Examples: Retinaldehyde, tretinoin, Isotretinoin, adapalene etc are used.
 Tretinoin should not be used during pregnancy and lactation.
- Glycolic acid creams are used to remove the outer layers of the skin.
- Silicon dioxide is used with some benefits.
- Elastin cream can promote formation of elastin.
- Hydroxyproline containing creams are useful.
- Alpha hydroxyl acids (8 to 10%) are used with good results.
- Glycerol is used as a moisturizer.

- Topical vitamins (E, A & K).
- Vitamin E oil is commonly used.
- Creams containing marine tissue extract are useful externally.
- Antioxidants (they act as scavengers of free radicals).
- Vaseline is routinely applied on the skin.
- Biopeptide CL containing creams are useful.
- Topical sunless tanning products are also useful.

Some naturally available substances are also used with good results, which are mentioned under a separate heading.

- **2. Masking methods:** Here the stretch marks are not removed, but kept covered by appropriate dressing and other methods like tattoo or ornaments etc.
- **3. Dermabrasion:** Here the superficial layer of the skin is removed by a procedure called micro dermabrasion, which will increase collagen production resulting in the formation of normal healthy skin. This method is recommended for those who do not prefer painful and expensive surgical techniques. This is the cheapest and harmless method among all types of skin resurfacing techniques. Here no chemicals or medicines are required. Micro dermabrasion involves the use of a pen like instrument that sandblasts the skin with tiny crystals to remove the cells in the superficial layer of the skin. On an average 10 to 12 sittings are needed for a better result.
- **4. Skin remodeling:** Here needles or lasers are used. Needle pricks can induce collagen production in the affected area.
- **5. Chemical peeling:** Here some chemicals in cream base are applied on the affected area. These creams can remove the epidermis of the skin. The dermis can produce more collagen and gradually normal skin is formed. However this method is painful and may even cause skin injury due to some

However this method is painful and may even cause skin injury due to some reactions.

Glycolic acid and Jessner's peels are commonly used. For medium depth peeling Trichloracetic acid is used. Here the skin becomes red & swollen for a few days and gradually becomes normal.

6. Laser treatment:

This is the most commonly used method, which gives better result than any other method. Statistics show that about 70% of cases treated with laser have given good results. However, laser cant give good results in all cases as it works on certain skin types.

Different types of lasers are used on the basis of the color of skin. Here a narrow beam of laser is transmitted through the affected skin that can stimulate the production of collagen. Laser can stimulate the division of fibroblasts of the skin, thereby promotes tissue repair. It is true that laser cant remove stretch marks, but improves their appearance. Dual laser treatment is effective after a few sittings. Pulse dye laser therapy is also used with sizeable results and is a better choice among different laser treatments. However laser therapy is expensive and also causes pain during the procedure. More over five to six sittings are needed to make some noticeable improvement. Laser therapy gives better results in red raised scars and pinkish stretch marks. However, modern laser therapy is very expensive.

7. Cosmetic Surgery:

Here surgical methods like skin grafting, skin reduction, liposuction etc are done. In case of horrible abdominal stretch marks with folded skin due to fat deposition that does not respond to normal methods can be managed by abdominoplasty. However this method is very expensive and may cause scars on the operated site.

8. Endermologie:

This mode of treatment was invented in France. Here, a special machine is used to massage the affected site with the help of rollers and a suctioning action of the machine. This method is supposed to improve the blood circulation and removal of toxic substances from the skin. It can also strengthen the connective tissues of the skin. Series of endermologie procedures have given marked improvement in the appearance of stretch marks.

10. Anti depressive medicines:

Those who are over anxious about stretch marks need mild doses of antidepressants and psychotherapy.

NATURAL SUBSTANCES FOR STRETCH MARKS

Many of us spend a lot for the prevention and treatment of stretch marks. Almost all modern methods are very expensive. A large number of external applications and cosmetics are also costly. But the same benefits can be achieved by using some natural substances available in the market. These may be natural food articles or natural substances for external application. Some household articles are very helpful and cheaper.

- a) Cocoa butter is the most popular external remedy for stretch marks.
- b) Oils: Examples: Fish oil, virgin olive oil, jojoba oil, lavender oil, borage oil, almond oil, apricot kernel oil, emu oil, sesame oil, wheat germ oil, rosehip oil, coconut oil, sandal wood oil, carrier oil, sunflower oil etc help to promote collagen production.
- c) Chamomile can be applied externally.
- d) Mimosa tenuiflora bark extract is indicated externally.
- e) Shea butter minimizes appearance of stretch marks.
- f) Avocado juice and salads are nutritious etc.
- g) Indian pennywort is used externally.
- h) Aloe Vera extract or gel is indicated externally.
- i) Grated beeswax can be applied externally.
- j) Emblica is used as a source of vitamins.
- k) Siegesbeckia orientalis is used externally.
- I) Mango butter is used externally.
- m) Persea gratissima extract is used externally.
- n) Equisetum arvense extract is used externally.
- o) Hedera helix extract is helpful for external use.

- p) Grape seed extract is applied externally due to its anti oxidant properties.
- q) External application of hibiscus makes the skin moist and prevents collagen rupture.
- r) Ivy wood extract is used externally due to its anti inflammatory properties.
- s) Centella increases blood circulation and promotes collagen synthesis.
- t) Ginseng is used both externally and internally due to its collagen breaking properties and nutritive value.

[It should be remembered that external applications should not be used without doctor's advice and sensitivity testing by applying on the forearm]

It is a fact that most of the moisturizers work for few hours and hence give temporary benefits. However, the process of massaging itself is helpful as it increases the blood circulation, that's why all external applications are useful to certain extent irrespective of their therapeutic quality.

ALTERNATIVE SYSTEMS FOR STRETCH MARKS

There are number of alternative mode of therapies, among them some are well established due to their efficacy. Almost all alternative methods treat the person with a holistic approach. Experience shows that, people with stretch marks show a good response to alternative therapies. Some useful treatment methods are given.

- · Homoeopathy.
- Chinese medicine.
- Naturopathy.
- Ayuveda.
- Unani.
- Acupuncture.
- Acupressure.
- Aromatherapy.

Etc....

HOW TO PREVENT STRETCH MARKS

The idea of prevention has got a great significance in all health related problems. The old dictum, "Prevention is better than cure", is fully applicable to every cosmetic lesion including stretch marks. We all know that modern treatment methods like cosmetic surgery and laser therapy are beyond the reach of ordinary man; hence, preventive measures have got greater importance.

The idea of prevention of stretch marks is still a topic of debate. Since there is a limit for the elasticity of skin, enormous stretching for a long time results in stretch marks. In case of pregnancy the abdominal wall has to keep stretching for a prolonged period to accommodate the enlarging uterus, and hence stretch marks during pregnancy are the most common among all types. However some preventive measures help to reduce the severity. But one thing is clear; prevention of stretch marks is much easier than its treatment.

However in the market, there are wide ranges of products available which are supposed to prevent stretch marks when applied on the skin throughout pregnancy. But most of the products have not been scientifically proved so far; yet people spend a lot of money.

There are some general guidelines to be followed by every person to prevent stretch marks.

1. <u>Balanced diet</u>: Balanced diet is most essential for the skin to maintain its quality. The diet should contain adequate amounts of carbohydrates, proteins, vitamins, lipids, minerals etc. Most important among them are proteins, vitamins like A, C, E, K and Zinc.

Proteins: Main sources are meat, fish, egg, soybeans nuts etc.

Vitamins: Among vitamins the most important are Vitamin A, Vitamin C, Vitamin E and vitamin K.

Vitamin A: Sources are Carrots, Vegetables, Rice, Pumpkin, Sweet Potato, Apricot, Spinach, Mango etc.

Vitamin C: Sources are Citrus fruits, Guava, Papaya, Strawberries etc.

Vitamin E: Sources are Almonds, Vegetable oils, Seeds, Sunflower, Oats, Peaches, Avocado etc.

Vitamin K: Green leafy vegetables, Cabbage, Liver, Milk products etc.

Zinc: Zinc is very essential for the formation of collagen. Mostly found in nuts, bananas, raisins, legumes and fish.

- 2. <u>Water intake:</u> Adequate amount of water should be taken every day to maintain the water balance of the body. When the skin becomes dry it is prone to stretch marks.
- 3. <u>Controlled weight gain:</u> Sudden increase in the body size is the main cause for stretch marks. Hence a controlled weight gain can reduce the chance greatly.
- 4. Exercise & relaxation techniques: Regular exercise and relaxation techniques can increase the blood supply to the skin and keep it intact. Exercise also helps to maintain the tone of muscles to prevent a big belly. It also helps to prevent excess of fat deposition. Exercise should be done regularly in a gentle manner. Rigorous exercise can be harmful and hence aerobic exercises are much useful for ordinary people. Similarly, walking, swimming, meditation, yoga, etc also help.
- 5. <u>Habits:</u> Avoid junk foods, over eating, tobacco, alcohol and excess use of steroids.
- 6. <u>Life style:</u> A healthy life style should be maintained.
- 7. <u>Sleep:</u> Sound sleep is very essential for the maintenance of good health. However, sleeping with snoring should be avoided.
- 8. External applications: These are not 100% effective. External application of cocoa butter, olive oil, almond oil, fish oil, lavender oil, aloe vera extract etc during pregnancy and controlled weight gain are useful. Similarly ointments containing Vitamin A & E are also widely used with some benefits.
- 9. <u>Milk bath:</u> Milk is a major ingredient in a few cosmetic creams due to its skin softening properties. In this method the entire body is soaked in a bathtub containing a cup of skimmed milk powder and sufficient quantity of water. By repeating this procedure the skin becomes soft and elastic. This method may be utilized as a preventive and curative method for stretch marks. Use of soap is contraindicated while having a milk bath.

SOME QUERIES

1. I am pregnant and just entered the second trimester. Not I am little bit tensed due to anticipation of stretch marks. Kindly suggest some preventive measures.

Stella, house wife, Canada.

Answer: Here are some tips to prevent stretch marks:-

Tip 1:- Take plenty of fruits, vegetables, nuts and sufficient quality of water. Citrus fruits, emblica, apricot, avocado, mango, soybeans, tomato etc are useful.

Tip 2: - Regularly apply cocoa butter or any other oils like lavender oil, olive oil, almond oil etc on the abdominal wall and massage gently. Before applying the oils or creams skin sensitivity testing should be done by applying a small quantity on your forearm and watch for any redness or itching.

Tip3: - Do mild breathing exercises, relaxation methods like yoga, meditation etc.

Tip 4: - Some women consider stretch marks as a badge of motherhood. Hence don't panic, just relax and expect a healthy baby from a healthy mother.

2. Recently I joined a health club and doing some exercises to develop my body. But I notice some white lines on the side of my hips and shoulders, kindly give a remedy.

John, law student, UK.

Answer: Skin stretching due to sudden change in the physical activity and muscle enlargement are the main causes behind these white lines, called stretch marks. Instead of doing rigorous exercises, do it gradually so that the skin will get sufficient time for stretching. Meanwhile take good nutritious food and apply olive oil or almond oil externally on the affected part.

3. I am a high school student in Alaska. Now I am greatly worried about white lines on my thighs and buttocks. Please suggest a remedy.

Helen, student, Alaska.

Answer: Hormonal changes and fat depositions due to puberty is the cause behind your stretch marks. But, remember, these are some physiological changes in the life of every woman. Any way, take good nutritious diet, do exercises and use some natural oils on the affected sites.

4. I delivered a healthy male baby by forceps delivery. But now I am very much depressed by the stretch marks on my belly. I applied some creams and natural oils, but no visible relief. Since I am model, these marks greatly affect me. Please suggest your views.

Austin, Canada.

Since you don't get any relief, you can go for a laser therapy for a better result. Please consult a cosmetologist in your locality.

5. I have stretch marks since my delivery. Recently my husband brought a special cream indicated for stretch marks. I used it for a few days but got severe itching and eruptions on the parts. Please give your opinion.

Ellis, Florida.

Answer: Hi Mrs. Ellis, your skin is allergic to that particular cream. You need some anti allergic treatments, please consult a dermatologist. Remember, before using any creams check the sensitivity of your skin by applying a small quantity of the same cream on the forearm. Warm regards.

CONCLUSION

So far, we have discussed the general aspects of stretch marks in brief. We have learned that in most cases stretch marks become less noticeable within a short span of time even without treatment; however this process can be accelerated with the use of some natural substances in the form of food and external applications. Those who need immediate relief from stretch marks may go for modern methods like laser therapy, dermabrasion and cosmetic surgery; however it is true that natural methods are economical and free from ill effects.