SYMPTOM

Macule

A macule is a flat area of skin that differs in color from nearby skin.

WHAT IT FEELS LIKE
Usually flat and painless, noticed as a color change

WHERE IT IS FELT
Anywhere on the skin or moist body linings

MOST COMMON CAUSES
Freckles, sun spots, marks after skin inflammation

WHEN IT IS URGENT
Non-fading red or purple spots with fever or severe illness

USUALLY LASTS
Days to years, based on the underlying cause

SEE A DOCTOR IF
A spot is new, changing, persistent, or otherwise concerning

Overview

A macule is a flat area of skin with a different color from the skin around it. You cannot usually feel an edge or raised surface when you run a finger across it.

Clinicians often use "macule" for a spot up to about 1 centimetre across. A larger flat area may be called a patch. These size definitions can differ slightly between medical references.

Macules may be brown, tan, white, red, pink, purple, or another color. The appearance depends on what is changing beneath the skin. This may involve pigment, small blood vessels, inflammation, or a small amount of bleeding under the skin.

"Macule" describes what a spot looks like. It is not a diagnosis. Many macules are harmless, but their cause cannot always be identified from color alone.

What it may feel or look like

A true macule is flat and usually has no texture. It may be a single spot or one of many spots. Its border can be sharp or blend gradually into nearby skin.

The spot itself often causes no symptoms. Itching, soreness, scaling, or warmth may come

from an underlying skin condition rather than from the macule itself. Fine scale can be difficult to see until the skin is gently examined.

On darker skin, redness may look purple, brown, grey, or darker than the surrounding skin. Changes in warmth, tenderness, swelling, and how you feel overall can be as important as color.

Features worth noticing include:

A clear photograph with the date can help you track change. Use similar lighting and include a ruler for scale.

- When the spot first appeared
- Whether it is changing in size, shape, or color
- Whether it fades when pressed
- Any itching, pain, scale, bleeding, or broken skin
- New medicines, illness, sun exposure, or skin irritation

Common causes

Common harmless causes include freckles and sun spots. Freckles often become more noticeable after sun exposure. Sun spots, also called solar lentigines, tend to remain visible and commonly develop on areas exposed to sunlight.

Skin inflammation can leave a flat color change after the original problem heals. This is called post-inflammatory pigment change. It may follow acne, eczema, an insect bite, a burn, or repeated rubbing. The area can become darker or lighter than your usual skin tone.

Other possible causes include:

A new or changing brown or black macule sometimes needs assessment for skin cancer. Warning features include an uneven shape, irregular border, several colors, or continuing change. Size alone does not show whether a spot is harmless.

Red or purple spots that do not fade under pressure are called non-blanching spots. They can result from minor causes, but they may also occur with infection, blood-clotting problems, or blood-vessel inflammation. How quickly they appeared and whether you feel ill help determine how urgent they are.

- Flat birthmarks or inherited pigment patterns
- Vitiligo, which causes areas to lose pigment

- Tinea versicolor, a fungal condition that may have very fine scale
- Reactions to medicines or contact with an irritating substance
- Small blood-vessel changes or minor bleeding beneath the skin

When to seek medical care

Arrange a routine appointment if a macule is unexplained, remains for several weeks, or concerns you. It should also be checked if it repeatedly itches, hurts, crusts, or bleeds.

Book a prompt appointment for a pigmented spot that is:

Seek same-day medical care for rapidly appearing red or purple spots that do not fade when pressed, especially with fever or worsening illness. Pressing a clear drinking glass against the area may help show whether it fades, but this test is not a diagnosis.

Call emergency services or go to an emergency department if non-fading spots occur with severe drowsiness, confusion, a stiff neck, breathing difficulty, fainting, a seizure, or rapidly worsening illness. Do not delay care to keep repeating a glass test.

- New and continuing to grow
- Becoming uneven in shape or color
- Different from your other spots
- Bleeding or failing to heal
- Changing over weeks or months

How the cause is found

A clinician will ask when the macule appeared, how it has changed, and whether there are symptoms elsewhere. They may ask about sun exposure, recent infections, medicines, allergies, injuries, and skin conditions.

The skin is examined for color, border, pattern, scale, and whether the spot is truly flat. Other areas of skin, the nails, or the inside of the mouth may also be checked.

A handheld magnifying device called a dermatoscope can show pigment and blood-vessel patterns that are not easy to see with the unaided eye. If infection is possible, a gentle skin scraping or swab may be taken.

Blood tests are not needed for most isolated macules. They may be used when widespread

spots or other symptoms suggest inflammation, infection, or a blood-clotting problem. Occasionally, a small skin sample called a biopsy is removed and examined under a microscope.

Treatment and self-care

Treatment depends on the cause rather than on the word "macule." Harmless freckles and stable birthmarks may need no treatment. Pigment left after inflammation often fades gradually, although this can take months or longer.

Protecting the area from sunlight can reduce further darkening. Use shade and protective clothing, and apply a broad-spectrum, water-resistant sunscreen with SPF 30 or higher to exposed skin.

Avoid picking, scrubbing, or repeatedly applying strong acids, bleaching products, or steroid like prednisone or hydrocortisone creams to an unexplained spot. These can irritate the skin, alter its color, or make assessment more difficult.

Do not stop a prescribed medicine because of a skin change without medical advice. If a widespread rash begins soon after a new medicine, contact a healthcare professional promptly. Emergency help is needed if it occurs with breathing trouble, facial swelling, faintness, or widespread blistering.

What to expect

How long a macule lasts depends on its cause. Redness after mild irritation may settle within days. Pigment changes after inflammation can remain for months. Freckles may fade when sun exposure decreases, while sun spots and many birthmarks can remain for years.

Some macules need monitoring rather than treatment. Photographs can help show whether a spot is stable. If it continues to change, develops symptoms, or no longer looks like your other spots, arrange another assessment even if it was checked before.

Common questions

Is a macule the same as a rash?

No. A macule is one type of visible skin change. A rash is a broader term for an outbreak that may include flat spots, bumps, blisters, scale, or several lesion types.

Can a macule be raised?

By definition, it is flat. A raised solid spot is usually called a papule. A spot can change over time, so a previously flat area may later develop texture.

Does every dark macule need testing?

No. Many are freckles, sun spots, birthmarks, or marks left by inflammation. A new, changing, uneven, bleeding, or unusual-looking spot should be assessed.

Can macules be contagious?

A macule itself is not contagious. Some infections that cause flat color changes can spread, while freckles, pigment changes, and birthmarks cannot.

Will a macule disappear?

Some fade once irritation or inflammation settles. Others remain because of lasting pigment changes, sun exposure, or a birthmark. The expected course depends on the cause.

Sources

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- American Academy of Dermatology Association. How to select a sunscreen
- National Health Service. Meningitis: Symptoms
- National Institute for Health and Care Excellence. Suspected cancer: Recognition and referral (NG12)