CONDITION

Recurrent multiple myeloma

Recurrent multiple myeloma is myeloma that begins growing again after responding to treatment.

WHAT IT IS
Multiple myeloma returning after treatment or remission

BODY SYSTEM
Blood, bone marrow, bones, kidneys, and immune system

MAIN SYMPTOMS
Bone pain, fatigue, infections, weakness

WHAT CAUSES IT
Treatment-resistant myeloma cells growing again

HOW IT IS DIAGNOSED
Blood and urine tests, imaging, sometimes bone marrow biopsy

MAIN TREATMENT
Combined anti-myeloma medicines, sometimes cell therapy or transplant

CAN IT BE CURED?
No - treatment can produce further remissions

IS IT AN EMERGENCY?
Sometimes - new weakness, confusion, or breathing trouble

LONG-TERM OUTLOOK
Treatable but usually returns; outlook reflects biology and response

Overview

Multiple myeloma is a cancer of plasma cells. Plasma cells are white blood cells that normally make antibodies to fight infection. In myeloma, abnormal plasma cells collect in the bone marrow and make an unusual antibody or antibody fragment.

Recurrent multiple myeloma means the cancer has started growing again after it responded to treatment. It is also called relapsed multiple myeloma. A remission is a period when tests show that the amount of myeloma has fallen substantially and symptoms have improved or disappeared.

Recurrence may first appear as a gradual change in blood or urine test results. This is sometimes called a biochemical relapse. In other people, recurrence causes symptoms or new organ damage, known as a clinical relapse.

Recurrent myeloma matters because growing plasma cells can interfere with normal blood-cell production and affect bones, kidneys, calcium levels, and infection protection. It does not always cause immediate symptoms, but it needs specialist assessment so that its pace and effects can be understood.

Recurrent myeloma is usually treatable, but it is not generally considered curable. Many people have more than one period of remission and receive different treatments over time.

Symptoms

A recurrence may be found during routine monitoring before you notice anything unusual. When symptoms occur, they may resemble those present when myeloma was first diagnosed.

Possible symptoms include:

Bone pain does not always mean that myeloma has returned. Treatment effects, arthritis, fractures, and other conditions can cause similar symptoms. Blood tests and imaging help identify the cause.

Some treatment side effects can also resemble myeloma symptoms. For example, tiredness may come from anaemia, an infection, medicine, poor sleep, or the cancer itself.

- Persistent or worsening pain, especially in the back, ribs, hips, or shoulders
- Tiredness, weakness, breathlessness, or looking pale from anaemia
- Frequent, severe, or slow-to-clear infections
- Increased thirst, frequent urination, constipation, nausea, or confusion
- Reduced appetite or unplanned weight loss
- Numbness, tingling, or weakness in the legs
- Foamy urine, swelling, or reduced urination if the kidneys are affected

Causes and risk factors

Recurrent myeloma develops because some abnormal plasma cells survive treatment. These cells may remain inactive for a time and then begin multiplying again. They may also acquire changes that make them less sensitive to medicines that worked before.

Recurrence is not caused by something you ate, an activity you did, or a failure to follow treatment correctly. Even after a deep response, a small number of myeloma cells may remain below the level detected by routine tests.

The likelihood and timing of recurrence are influenced by features such as:

Multiple myeloma is not usually inherited in a simple, predictable way. Having a close relative with myeloma may modestly increase a person's risk of developing it, but most relatives do not develop the condition.

- Genetic changes within the myeloma cells
- How quickly the myeloma grew before
- The depth and length of the previous response
- Whether the cancer stopped responding while treatment was continuing
- Which treatments have already been used

Diagnosis

If monitoring tests suggest recurrence, your haematology team will look at the pattern over time. A single abnormal result does not always confirm that myeloma is growing again.

Blood tests may measure the abnormal antibody, called the monoclonal protein or M protein. They may also measure free light chains, which are antibody fragments. Other tests check blood-cell counts, kidney function, calcium, and albumin.

Urine testing may detect myeloma proteins passing through the kidneys. Imaging such as low-dose whole-body CT, MRI, or PET-CT may look for bone damage, collections of plasma cells, or active areas of myeloma.

A bone marrow biopsy removes a small sample, usually from the back of the hip bone. It can show how many plasma cells are present and may identify genetic features that help guide treatment. A biopsy is not required for every suspected recurrence.

The team will also assess whether the recurrence is causing complications and how quickly it is progressing. This helps determine whether treatment should begin promptly or whether close monitoring is reasonable for a short time.

Treatment and management

Treatment is tailored to the myeloma, your previous treatments, other health conditions, and what matters to you. The aim is usually to control the cancer, prevent organ damage, relieve symptoms, and achieve another remission.

Most treatments use a combination of medicines from different groups. These may include

proteasome inhibitors, which disrupt protein handling inside myeloma cells; immunomodulatory medicines, which affect cancer cells and immune activity; monoclonal antibodies, which target proteins on myeloma cells; and corticosteroids like prednisone or hydrocortisone , which help kill myeloma cells and support other treatments.

A combination may reuse a medicine that worked well before, particularly after a long remission. If myeloma returned during treatment or soon after it, the cancer may be described as refractory to that medicine. A different treatment class is then more likely to be considered.

Other options for some people include:

CAR T-cell therapy and bispecific antibodies can cause significant immune reactions and infections, so they require specialist monitoring. Eligibility for these treatments is based on more than age alone.

Supportive care remains important. It may include treatment for pain, anaemia, infections, kidney problems, or high calcium. Bone-strengthening medicines may reduce fractures and other bone complications. Some anti-myeloma treatments require medicines to reduce specific infection or blood-clot risks.

Treatment decisions should account for practical issues as well as test results. These include time in hospital, travel to a specialist centre, effects on work or caring responsibilities, fertility concerns, and the side effects you consider most difficult.

- An autologous stem cell transplant, using your own previously collected or newly collected stem cells
- CAR T-cell therapy, in which your immune cells are modified to recognise myeloma
- Bispecific antibodies, which connect immune cells to myeloma cells
- Radiotherapy for a painful or threatening area of bone damage
- Participation in a clinical trial of a newer treatment or combination

Complications

Recurrent myeloma and its treatments can both cause complications.

Damage to bones may cause pain, fractures, or collapse of bones in the spine. A damaged vertebra can occasionally press on the spinal cord or nerves.

Reduced production of normal blood cells may cause anaemia, bleeding problems, or increased infection risk. Myeloma proteins, dehydration, high calcium, infection, and some medicines can strain the kidneys.

High calcium from bone breakdown can cause thirst, constipation, nausea, drowsiness, or confusion. Severe cases require urgent treatment.

Treatment may also cause nerve pain, diarrhoea or constipation, fatigue, blood clots, low blood counts, or weakened immune protection. The exact risks differ between treatments. Reporting side effects early may allow supportive treatment or an adjustment to the treatment plan.

Prevention

There is no proven way to prevent multiple myeloma from recurring. Recurrence results from myeloma cells that survive and begin growing again, not from a particular lifestyle choice.

Maintenance treatment can delay recurrence for some people, but it cannot guarantee that myeloma will not return. Its potential benefits and side effects need to be considered for each person.

Regular monitoring cannot prevent recurrence either, but it can identify changes before major complications develop. Keeping appointments and completing planned blood or urine tests helps your team see trends over time.

General measures such as not smoking, staying active within your limits, eating adequately, and protecting kidney health can support overall health. They should not be presented as ways to stop myeloma from returning.

Living with it and what to expect

Recurrent multiple myeloma is usually managed as a long-term cancer with periods of treatment, response, monitoring, and further treatment. Some people have long remissions. Others have myeloma that returns sooner or becomes harder to control.

Later remissions are often shorter than earlier ones, but this is not true for everyone. Newer treatments may produce deep responses even after several previous treatments. No test can predict an individual's course with certainty.

During treatment, you may have frequent blood tests and appointments. Monitoring is often less frequent during a stable remission, although it continues because laboratory changes may appear before symptoms.

Daily life can shift between relatively well periods and times when treatment or symptoms require more support. Many people continue working, travelling, exercising, and taking part in family life, sometimes with adjustments. Fatigue, infection precautions, pain, and appointment

schedules may affect what is practical.

Ask for help with symptoms that interfere with sleep, movement, eating, mood, or independence. Palliative care can be provided alongside cancer treatment at any stage. It focuses on symptom relief, emotional support, and quality of life; it is not limited to the end of life.

It can also help to keep a current list of treatments, allergies, important test results, and contact details for your haematology team. This is useful when receiving urgent care away from your usual centre.

When to get medical help

Contact your haematology team promptly if you develop new or worsening bone pain, unusual tiredness, repeated infections, reduced urination, increasing thirst, or side effects that make it difficult to eat, drink, walk, or take medicines. These concerns usually need timely assessment but are not always emergencies.

If you are receiving treatment, follow the specific instructions provided for fever or infection. A fever, shaking chills, or sudden illness can require same-day assessment because treatment may lower infection-fighting white blood cells.

Seek emergency help for:

These symptoms can have causes other than myeloma, but they need urgent assessment.

Routine questions about stable symptoms, test trends, future treatment choices, or ongoing side effects can usually be discussed at a planned appointment or through your treatment team's usual contact route.

- New leg weakness, loss of sensation, difficulty walking, or loss of bladder or bowel control
- Sudden severe back pain with numbness or weakness
- Severe confusion, unusual drowsiness, collapse, or a seizure
- Chest pain, severe breathing difficulty, or coughing up blood
- Very little urine with severe weakness, vomiting, or dehydration
- Uncontrolled bleeding

Common questions

Is recurrent myeloma the same as refractory myeloma?

Not exactly. Recurrent or relapsed myeloma returned after a response or remission. Refractory myeloma did not respond adequately to a treatment or progressed while receiving it, or soon afterward. Myeloma can be both relapsed and refractory.

Can recurrent multiple myeloma be cured?

It is not generally considered curable. Treatment can reduce the amount of myeloma, protect organs, improve symptoms, and produce another remission. The length of that remission differs between people and treatments.

Does a rising M protein mean I need treatment immediately?

Not always. A steady rise may show that myeloma is becoming active again, but treatment timing also reflects how quickly it is rising, other test results, symptoms, and signs of organ damage. Your team will usually examine the trend rather than one result alone.

How many times can multiple myeloma come back?

There is no fixed number. Some people receive several different lines of treatment over a period of years. Available options depend on previous responses, side effects, myeloma features, general health, and access to specialist treatments or trials.

Can I travel with recurrent multiple myeloma?

Travel may be possible when you are stable, but treatment schedules, infection risk, insurance, and access to medical care need planning. Air travel may not be suitable during some complications or soon after certain treatments. Discuss specific plans with your treatment team before booking.

What happens if treatment stops working?

Your team may test the myeloma again and consider a medicine from another class, a new combination, cellular therapy, a clinical trial, or treatment focused mainly on symptoms and quality of life. The choice should reflect both medical options and your priorities.

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