

WHAT'S NEW

SEMAGLUTIDE: FROM DRUG TO THERAPY

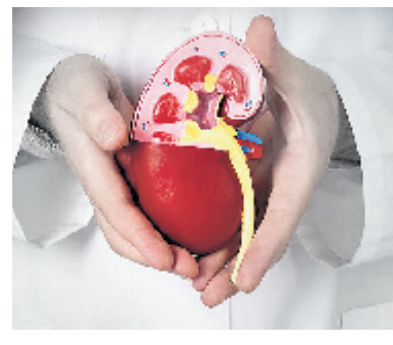
Relieves internal blood pressure: Study shows it lowers physical resistance in the kidney's micro-vessels, stabilising blood flow and preventing high-pressure damage to the filtration units

Halts tissue scarring: Blocks inflammatory pathways that cause cortical fibrosis (progressive scarring of the kidney's outer layer), preserving healthy tissue



Repairs the kidney's filter: Triggers cellular repairs in the glomerular filtration barrier, which stops harmful proteins from leaking out into the urine

Reduces toxic local fat: Targets and shrinks the fat surrounding and inside the kidney, removing physical compression and lowering localised inflammation



Maintains long-term function: By preventing structural damage, it stabilises the eGFR (the kidney's filtration rate) and drastically slows down the progression toward kidney failure

Recent clinical trials show that semaglutide protects kidneys in patients with type-2 diabetes and chronic kidney disease through direct structural & metabolic mechanisms

Childhood cancers have better cure rate

COMMON TYPES

The most common types of cancer affecting children include leukaemias, brain tumours and solid tumours such as neuroblastoma and Wilms tumour; lymphomas, bone cancer and thyroid cancer are more common during adolescence

In India, the most common cancer in children is leukaemia or blood cancer, followed by brain tumours

RETINOBLASTOMA

Retinoblastoma is a cancer of the eye that usually occurs in very young children. Parents may notice a white reflection from the pupil, particularly in photographs taken with a flash, called a "white eye" or leukocoria

Other signs may include a new squint, a change in the appearance of the eye, redness or swelling

Early diagnosis of retinoblastoma can be critical because treatment can not only save the child's life but, in many cases, also preserve vision

CHILDHOOD LEUKAEMIA (BLOOD CANCER)

Leukaemia is one of the most common childhood cancers

May present with symptoms like persistent fever, pallor (paleness), **unusual tiredness**, bruising or bleeding, bone or joint pain, recurrent infections, or enlarged lymph nodes or liver and spleen

These symptoms are not specific to leukaemia and are frequently seen in children with much more common illnesses

KAVITA BAJELI-DATT @ New Delhi

NANDINI (name changed) was diagnosed with acute leukaemia, a type of blood cancer, in 2023 when she was just 17 years old. Her parents were hesitant to pursue treatment because they were concerned about side effects and her future after receiving cancer therapy at a young age. However, the girl from Karnataka was determined to fight the battle bravely.

Despite facing multiple social and logistical challenges, she completed seven months of intensive therapy, returned home, and has now completed Class 12 and her therapy. Today, she is cancer-free and spreading the message of the curability of blood cancer. Now, she is busy chasing her dream of becoming an IPS officer.

Also take the case of Ananya (name changed) from rural Karnataka, who presented with a large swelling in the abdomen in 2022 when she was three years old. Tests found she had a kidney tumour called Wilms tumour, a rare type of kidney cancer that mostly affects children under the age of five.

She underwent chemotherapy for six months to shrink her tumour; later underwent surgery, and a few cycles of chemotherapy to prevent tumour recurrence. She is cancer-free, off all medications, and vaccinated appropriately for her age. Back in school, she is now in Class 2 and living just like other children in her class.

Childhood cancer is curable if detected early and treated appropriately by a multidisciplinary team. "All childhood cancers combined have a cure rate of around 70-80% in our country," said Dr Vasudeva Bhat K, HoD of paediatric oncology at Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Karnataka, who treated the two girls.

Each year, an estimated 4 lakh childhood cancer cases are reported globally. India records over 76,000. Around 17,000 children died of cancer in India in 2023, and South Asia accounts for nearly a fifth of the world's childhood cancer deaths.

The types of cancer that occur in adults are different from the types of cancer that affect children. Adult cancers mainly originate in organs, whereas childhood cancers involve tissues such as the hematopoietic, lymphatic, central nervous system, muscles and bones.

Childhood cancer is a general term that refers to a large group of diseases. There are dozens of childhood cancer types and many more subtypes.

According to the 2023 Global Burden of Disease study published in The Lancet Oncology, India reports the high numbers of childhood cancer cases with significant gaps in diagnosis, treatment and data systems, while survival rates remain uneven despite many of these cancers being treatable.

For the vast majority of children, predicting in advance who will develop cancer is difficult. There is no routine blood test or scan that can screen healthy children for all childhood cancers. However, children who belong to families with certain inherited cancer-predisposition syndromes may need specialised genetic counselling and regular surveillance.

Most of the symptoms associated with childhood cancer are more commonly caused by ordinary childhood illnesses. Therefore, having one of these symptoms does not mean that a child has cancer. "However, parents should seek medical attention if a symptom is persistent, unexplained, progressively worsening, or unusual for that child," added Dr Deepak Bansal, professor,

hematology-oncology, Advanced Paediatrics Centre, Postgraduate Institute of Medical Education and Research (PGI), Chandigarh. The key message is persistence and progression, he said, adding that a child with an ordinary viral infection may have fever, tiredness or enlarged lymph nodes for a short period.

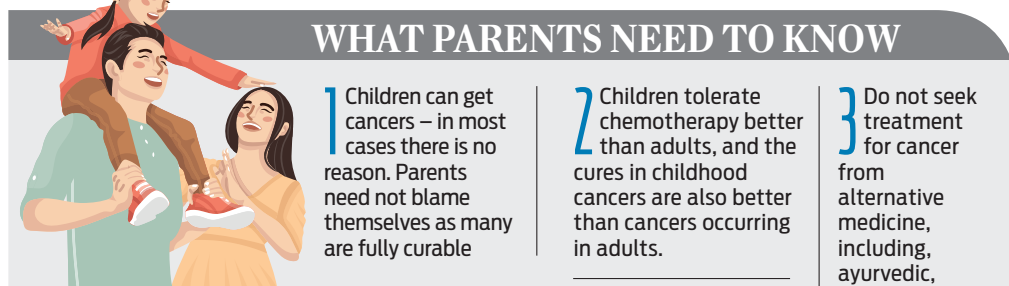
"Cancers can present in different ways in children based on the type of cancer; the organ involved and the extent of spread of the disease," said Dr Ramya Uppuluri, consultant, paediatric haematology-oncology, BMT, Apollo Hospital, Chennai.

"The point to note is that any symptom which is very prolonged or very unusual or very severe, more than what would be expected for a simple routine condition or infection, needs to be investigated. For example, children having leg pain is not uncommon. However, leg pain that is debilitating or that wakes up the child at night needs investigation," she added.

Unlike many adult cancers, childhood cancers are generally not caused by smoking, alcohol, obesity or long-term lifestyle habits. "A small proportion of childhood cancers are associated with inherited genetic conditions like retinoblastoma – eye cancer," said Dr Bansal.

"For most childhood cancers, there is currently no proven way to prevent them. Therefore, parents should not feel guilty or blame themselves if their child develops cancer," he added.

Over the past decade, the incidence of childhood cancer has increased globally and in India. "It is predominantly due to increased awareness, early detection, and better reporting of cases," said Dr Uppuluri. What matters, she said, is early diagnosis and early referral to a paediatric cancer centre to ensure right tests and diagnosis happen at the right time.



WHAT PARENTS NEED TO KNOW

1 Children can get cancers – in most cases there is no reason. Parents need not blame themselves as many are fully curable

2 Children tolerate chemotherapy better than adults, and the cures in childhood cancers are also better than cancers occurring in adults.

3 Do not seek treatment for cancer from alternative medicine, including, ayurvedic, homeopathic, baba or desi treatment. There is no shortcut to cancer treatment

6 A healthy diet is essential for good recovery

5 Help from the government, including Ayushman Bharat, PM or CM fund and several NGOs is available for treatment of cancers

4 Allopathic treatments are scientifically proven, with success or failure in defined percentage of patients

An unexplained **lump** or swelling, particularly if it continues to grow

Persistent fever without an obvious cause
Unusual paleness, tiredness or weakness

IMPORTANT WARNING SIGNS INCLUDE

Enlarged lymph nodes that persist or continue to increase in size
Persistent abdominal swelling or a mass

Persistent headaches, especially when associated with vomiting or neurological symptoms

Easy or unexplained bleeding or **bruising**

Persistent bone or **joint pain**, particularly if it causes limping or interferes with activity

KAVITA BAJELI-DATT @ New Delhi

DELHI-BASED Aaryan Vohra was not even five years old when he was diagnosed with blood cancer. Initially, his parents thought it was just a common childhood illness as he was falling ill too often. But one day, when his fever crossed 106°F and his haemoglobin dropped to 3 g/dL, they panicked and rushed him to the hospital.

A bone marrow test revealed the truth. Today, studying law at a private college in Fariabad, 20-year-old Vohra proudly calls himself a cancer survivor. Vohra's mother Monica Vohra said that early leukaemia detection made all the difference.

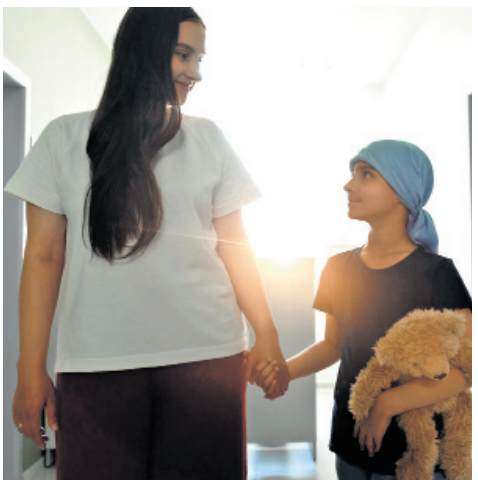
"Parents have no idea that blood cancer is curable. Today, the country not only has the best possible treatment, but financial support too. What is needed is early detection," said Vohra, who in 2012 launched 'Leukemia Crusaders,' which has provided over 5,500 underprivileged children initial bridge money so that parents can start treatment early, which increases the chances of cure.

"While in Western countries, the survival rate from blood cancer is 90%, in India it is much lower. The reason is only a lack of awareness, as parents don't know it is treatable and curable," said Vohra, who is the managing trustee of the NGO. She said there is fear associated with blood cancer but not much knowledge. "Due to lack of awareness, people turn to alternative medicine, which could cause much damage," she added.

Dr Deepak Bansal, professor at Advanced Paediatrics Centre, PGI, Chandigarh, said, "Many childhood cancers are curable. Treatment depends on the type of cancer and may include chemotherapy, surgery, radiotherapy, targeted therapy, immunotherapy, or combinations of these treatments. A few require stem-cell transplantation also."

A recent article in The Indian Journal of Medical Research (IJMR), published on behalf of the Indian Council of Medical Research (ICMR), states that "survival outcomes for childhood cancer in India have improved over the past few decades, resulting in a growing population of survivors."

"It has been achieved through increased awareness among the physicians, early refer-



'AWARENESS LOW, MANY TURNING TO ALTERNATIVE MEDICINE'

ral and diagnosis, appropriate staging and risk stratification, improved delivery of therapy, and increased availability of paediatric oncologists. Advances in surgical techniques, radiation therapy, and supportive care – including safe transfusion practices, effective antiemetics, and antimicrobial agents – have further contributed to improved outcomes," said the article, which was co-authored by Dr Bansal.

Experts said what is not known is that children tolerate chemotherapy better than adults, and the cures in childhood cancers are also better than cancers occurring in adults. Despite treatment being available, most patients arrive late because of delayed diagnosis or referrals from paediatricians.

Dr Vasudeva Bhat K, HoD of paediatric oncology, Kasturba Medical College, Manipal Academy of Higher Education, Karnataka, said that for certain childhood cancers like

Hodgkin's Lymphoma and Wilms tumour, cure rates are as high as 90-95%. "However, in India, the cure rates are 10-15% lower in our country due to delayed presentation and higher rate of infections."

But, he added that it is not that India is not equipped to treat childhood cancer.

"The treatment is on par with the developed world, and most treatment protocols are adapted from high-income countries. India has all the modalities of cancer treatment, including chemotherapy, surgical and radiation oncology expertise. While most of these facilities are located in tier 1 cities, tier 2 and 3 cities are also seeing a lot of comprehensive cancer care centres coming up," Dr Bhat added.

Nutrition also plays a huge role in a child's cancer treatment and subsequent recovery. WHO's CureAll framework – an operational guide designed to support countries in building and scaling up sustainable national childhood cancer programmes as part of WHO Global Initiative for Childhood Cancer – recognises that poor nutritional status increases infection risk, treatment-related toxicity and treatment abandonment.

According to Purnota Dutta Bahl, founder and CEO of Cuddles Foundation, which works with government and charity cancer hospitals to provide trained paediatric oncology nutritionists, "Nutrition is part of the treatment, not something that comes after it."

"A child's body needs enough calories and protein to tolerate chemotherapy, heal between cycles and resist infection." What is important to know is that good nutrition can help a child stay on treatment, complete it, and come out of it stronger.

According to Poonam Bagai, Founder and Chairman, CanKidsKidsCan, a national society for change for childhood cancer in India, childhood cancer is highly curable, yet too many children in India are diagnosed late or leave treatment unfinished because their families cannot afford to continue.

For India to meet the WHO Global Initiative for Childhood Cancer, which aims for at least 60% survival by 2030, a target recognised at the 80th UN General Assembly, children must have timely access to diagnosis, treatment and continued support, regardless of where they live.

Adult cancers mainly originate in organs, whereas cancers in children involve tissues, such as hematopoietic, lymphatic, central nervous system, muscle and bone tissues

newindianexpress.com



MYTH BUSTERS
Dr Girish Chinnaswamy

Professor (paediatric oncology) at Tata Memorial Hospital, Mumbai



Myth: Childhood cancers are hereditary

Fact: Only a small proportion of childhood cancers are hereditary: fewer than 10% are linked to an inherited gene change.



Myth: There is no cure for childhood cancer

Fact: Most childhood cancers are curable. In fact, more than 80% of children are cured in well-resourced settings, and common cancers such as acute lymphoblastic leukaemia have high cure rates at specialised centres in India too.



Myth: Children cannot tolerate cancer treatment

Fact: Children often tolerate intensive treatment better than adults and recover faster, partly because they usually do not have the co-morbidities commonly seen in adults, such as diabetes, hypertension, or heart, kidney, liver or lung disease.



Myth: Childhood cancers are the same as adult cancers

Fact: Childhood cancers are different diseases. They often grow quickly, but they also respond far better than most adult cancers to conventional treatments such as chemotherapy and radiotherapy.



Myth: A bone marrow test is very painful

Fact: In children, the test is usually done under sedation or anaesthesia, so the child feels no pain. It takes only a few minutes, and at most there may be mild soreness afterwards.

Myth: Treatment always leaves long-term damage

Fact: Childhood cancer treatment has changed substantially in recent years, and current protocols are designed to reduce these risks. With regular long-term follow-up, most survivors grow up to lead healthy, productive lives.



UNLIKE CANCERS IN ADULTS, LIFESTYLE PLAYS LITTLE ROLE HERE

CHILDHOOD cancer is curable if it is detected in time, said Prof (Dr) Manas Kalra, Senior Consultant, Sir Ganga Ram Hospital, New Delhi. Speaking to Kavita Bajeli-Datt, he said India needs a dedicated childhood cancer policy to meet the WHO's Global Initiative for Childhood Cancer goal of 60% survival by 2030. Edited excerpts:

Q Is childhood cancer incidence rising in India? What is the reason?

Yes, the reported numbers are rising. Part of this is a true increase, but a large part is better detection – more paediatric oncology centres, wider awareness, and improved diagnostic access mean cases that once went unrecorded are now being picked up. Unlike adult cancers, lifestyle factors play little role here – most childhood cancers arise from genetic changes in early development, not something a family did or didn't do.

Q Can childhood cancer be cured?

Childhood cancer is one of the great success stories of modern medicine – and also one of its great unfinished stories. Many childhood cancers are highly curable when caught early and treated properly; a leukaemia that would have been a death sentence 40 years ago is cured in the vast majority of children in the right setting. WHO's own numbers capture the divide starkly: cure rates above 80% in high-income countries, versus under 30% in many low and middle income countries – a gap driven almost entirely by access and drug availability, not biology. India sits uncomfortably in the middle of that gap. Our leading centres now match global cure rates for common cancers like acute lymphoblastic leukaemia. Still, the national average is dragged down by late diagnosis, treatment abandonment, and uneven access outside major cities.

As I often tell parents: "This is not a cancer we manage – it's a cancer we can cure. The tragedy is when a child doesn't get the chance." That, in many ways, is the real Indian story of childhood cancer.