



SERUM TIMES

Monthly | Volume IX | Issue IV | April 2024

SERUM MEDICAL BULLETIN

From the desk of the Editor-in-Chief

Dear Readers/Doctors,

Hope you are well! We have safely passed the festival season and thankfully there was no serious health issue in the news in this phase. Though Covid cases have been on the rise with mild effects on the patients. We'd like to advise you to take care of this. At the same time, we would like to let you know of some common diseases more common in the summer season. Some of them can be cured easily but at the same time, they may turn into serious health problems if they are neglected.



The most common summer diseases are 1) food poisoning, 2) sunstroke and sunburn, 3) chickenpox, 4) jaundice, 5) dehydration, 6) hay fever, 7) asthma, and 8) typhoid. Many other diseases are found among common masses, especially, in the summer season. In this issue, we will give you some tips that may help you to stay healthy and safe in this season from the said diseases.

One report that has increased the anxiety of our health policymakers has been the escalation of respiratory diseases. It is reported (Indian Express, 21 February 2024) that the number of cases of respiratory diseases, particularly, influenza A (H1N1), has been a growing concern in India. Data from the National Centre for Diseases Control (NCDC) suggests a resurgence of influenza cases in many states, such as Kerala, Maharashtra, Punjab, Tamil Nadu, Telangana, Chhattisgarh, Sikkim, Uttarakhand, and West Bengal. Some of the states also reported deaths related to influenza. We will discuss this serious matter in one of our future issues.

Story 2 discusses factors responsible for increasing the chance of dementia. Dementia has been a growing concern around the world. ST already had written on this issue in the past. However, the latest research has identified the most important factors that increase the chance of dementia. It has resulted from the long study period that was done on more than 3.5 lakh adult persons who were, on average, 55 years old. A recent report discusses this research and points out that matters like social isolation, alcohol use disorder, and preventable or poorly managed chronic health conditions are all among the risk factors. The research was published in JAMA Neurology, a well-circulated medical magazine. The study was conducted by the neurology department of Boston University.

Hope the topics will help you all in some ways or others. Wish you very healthy lives to all of you. Stay safe.

With best wishes,

Sanjib Acharya

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Awareness about summer season illness is the key to staying safe

Several health problems arise, mainly, in the summer season. Everybody should be aware of these to stay safe in the summer. The purpose of this article is to make our readers aware of the summer health problems and provide some tips regarding how to prevent them. Some of the most common summer season diseases are 1) dehydration, 2) sunstroke, 3) hay fever, 4) food poisoning, 5) sunburns, 6) chickenpox, 7) jaundice.

1. Dehydration - when the water content in your body decreases then dehydration starts. It happens due to a lot of sweat, perspiration, and urination of a person. So the body requires more water to sustain itself. Dehydration can be felt when one feels thirsty, urination is dark-hued, and sometimes experiences headache.

One should drink plenty of water at regular intervals. One can also drink coconut water, lassi, or fruits like water lemons, grapes mangoes, or other suitable items that can supply plenty of water to your body.

2. Sunstroke - generally happens with one's long exposure to the sun at a day temperature of more than 40 degrees C. Sunstroke is triggered when dehydration starts in the body. In that case, the human body cannot regulate internal temperature. One can keep vigil whether a person has a headache, dizziness, muscle cramps, seizures, or high heart rate which are the symptoms of sunstroke.

3. Hay fever - a kind of allergy that arises when the body cannot fight off foreign bodies entering it. In the summer, flowers bloom, and the chances of pollens coming in contact with the human body increase. One can understand this if congested nose and watering eyes, coughing and sneezing along with fever are visible. Use of pollution mask at this time and may consult with doctors if one is more prone to hay fever.

4. Food poisoning - it occurs more in summer as several microorganisms such as Salmonella and Clostridium



are more active and they multiply in food. So always try to keep and store food properly. Stomach cramps, nausea, and vomiting, diarrhoea, and fever are symptoms of food poisoning. Avoid undercooked food strictly as in such items microorganisms easily multiply.

5. Sunburns - these happen when one is exposed to the sun for a long period and sometimes harmful ultraviolet rays like UVA and UVB penetrate one's skin. That may cause sunburn. It is suggested to apply a special lotion to the body for 20 minutes before going into the sun that may protect one to an extent.

6. Chickenpox - a well-known summer disease. Children are more affected by this. It spreads through air-borne particles when an infected person coughs or sneezes. To prevent it one should take anti chicken pox vaccine in time.

7. Jaundice - it is a deadly disease experienced, mainly, in the summer. One can experience this when Hepatitis B enters into the body through contaminated food or water. It may affect the liver and that is a very dangerous part of the disease. Yellow skin, pale eyes, dark-coloured urine, and itchy skin are the common symptoms of jaundice. To prevent it be cautious about contaminated food and maintain a healthy life.

Preventive vaccination is also suggested.



Factors responsible for onset of dementia identified

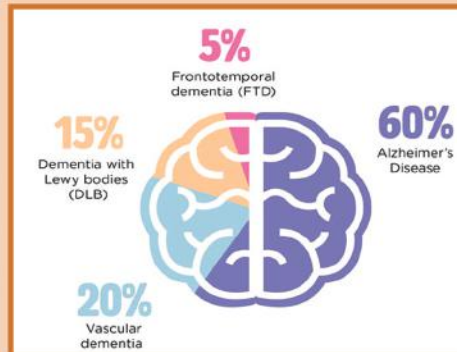
People, particularly the older, are very much anxious about dementia. Even the doctors were not very sure of the treatment and recovery of it as lack of ability to pinpoint the causes behind the emergence of the disease. A new research claims to have identified 15 factors responsible for the early onset of dementia. Now it is believed that there are a lot of concrete things that people can do in their forties and fifties to help reduce the problem.

The research methodology

The researchers examined detailed genetic and medical information for roughly 356,000 adults who were 55 years old on average with no history of dementia. During an average follow-up of eight years, 485 people were diagnosed with “young-onset”, dementia- a popular clinical term. It means those who were caught with dementia under the age of 65 years.

The observation of the study

The study observes that there are several concrete factors responsible for the emergence of dementia. According to the researchers (published in JAMA, Neurology), some of the important factors have been social isolation, alcohol use disorder, and preventable or poorly managed chronic health conditions were all among the risk factors associated with an increased risk of young-onset dementia. After the publication of the research findings Andrew Budson, professor of neurology at Boston University reportedly said that it was good news because those were what were known as modifiable risk factors which meant people had some control over their odds of developing young-onset dementia. He also reportedly said, “Staying healthy is the most important to the brain, and unhealthy choices often show up first in the brain.”



Fifteen risk factors for early-onset dementia based on the research

- 1) Lower formal education,
- 2) lower socioeconomic status,
- 3) two copies of the APOE4 gene,
- 4) alcohol use disorder,
- 5) social isolation,
- 6) vitamin D deficiency,
- 7) high C-reactive protein levels,
- 8) lower hand grip strength,
- 9) no alcohol use,
- 10) hearing impairment,
- 11) diabetes,
- 12) heart disease,
- 13) depression,
- 14) orthostatic hypotension,
- 15) stroke.

It is clear that most of the mentioned factors like drinking, depression, social isolation, diabetes, and heart disease, can either be treated or controlled. So, the new research is expected to be a big leap forward to treat or prevent dementia.





CASE PRESENTATION by Dr. Chirasri Goswami (MBBS, MD) Consultant Histopathologist

CASE PROFILE: 54 years old lady presented with a mass at the lower pole of Right Kidney.

DIAGNOSIS: PAPILLARY RENAL CELL CARCINOMA (Chromophilic) (Nuclear grade 2).

INCIDENCE: It comprises 10-20% of Renal cell carcinomas incidence of which is 1/1 lakh population.

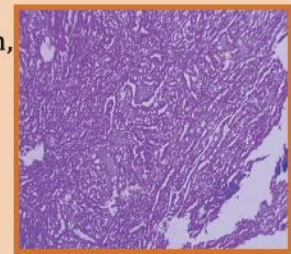
GROSS APPEARANCE: If was a well circumscribed, globular, pale tan tumour.

MICROSCOPIC FINDINGS: Tightly packed papillae with delicate fibrovascular cores lined by cells having abundant eosinophilic cytoplasm & prominent nucleoli (visible on high power only).

IMMUNOHISTOCHEMISTRY: CK7, CK AE 1/3, EMA, PAX-8, Vimentin, AMACR stains are positive. CD57 & GATA 3 negative.

CYTOGENETIC STUDY: MET mutations, gain in chromosome 7 & 17 etc.

PROGNOSIS: 16% mortality at 10years, prognosis is better than clear cell carcinoma of kidney.



CSR Activities & Events of SERUM throughout March 2024



Mar 1: Sri Sanjib Acharya at the Cultural & Thalassemia Awareness Programme



Mar 3: Sri Sanjib Acharya at Photography Contest 2023



Mar 9: Celebration of International Womens Day



Mar 17: Sri Sanjib Acharya at the Blood Donation & Free Health Checkup Camp



Mar 17: Sri Sanjib Acharya at Sit & Draw program of Specially-abled & handicapped children



Mar 18: 2 years birthday celebration of Varsha The School for specially-abled Children



Mar 21: Sri Sanjib Acharya at the workshop on Industrial Induction - ID & BG Hospital

Mar 23: Thalassemia Awareness Campaign at NSS Unit of BSAE University



Mar 25: Celebration of Dol Utsav at Jibanpur Vanaprastha Village



An initiative of **SERUM Analysis Centre (P) Ltd.**

This is a Medical Bulletin. Edited, compiled & published by Editorial Board for and on behalf of SERUM Analysis Centre (P) Ltd., 82/4B, Bidhan Sarani, Kolkata 700004.

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