Health Highlight:

Cancer Among People Younger than 50 years old

(collectively known as early-onset cancer)

A brief Journal review and summary

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With the recent world news on the Princess of Wales's announcement of her cancer diagnosis on Friday 22.3.24, I will like to share some information on the topic of *'early- onset cancer'*.

Taken from The Telegraph news reported on 24.3.24

Henry Bodkin Sun, 24 March 2024 at 1:13 am SGT

'As Princess of Wales reveals diagnosis, doctors warn of mysterious cancer 'epidemic'

Following the Princess of Wales's announcement of her diagnosis on Friday 22.3.24, specialist clinicians have said that in recent years they have seen a significant increase in under-45s presenting with cancers typically seen in older patients.

Many are fit and outwardly healthy, prompting a scramble among scientists to establish what is causing the trend.

One study that looked at data from Northern Ireland between 1993 and 2019 found the rate of early-onset cancers increased by 20.5 per cent, the equivalent of about 7,000 extra cases a year across the UK.

These cancers include those that come under the umbrella term "abdominal".

The Princess has not revealed what type of cancer she is receiving treatment for. However, her statement on Friday said it was discovered following abdominal surgery in January.

Greater awareness of cancer

A greater general awareness of cancer and desire to get symptoms checked out is likely to play a part in the rise of documented cases.

Dr Shivan Sivakumar, associate professor in oncology at the University of Birmingham, agreed with Prof Beggs: "There is an epidemic currently of young people getting cancer (under 50s).

"It is unknown the cause of this, but we are seeing more patients getting abdominal cancers."

Models based on global data predict that <u>the number of early-onset cancer cases will increase</u> <u>by around 30 per cent</u> between 2019 and 2030, a markedly faster increase than the previous 30 years.

Michelle Mitchell, its chief executive, said: "High profile cancer cases often act as a prompt to encourage people to find out more or think about their own health."

Title of Journal:

Original Investigation

Global Health

August 16, 2023

Patterns in Cancer Incidence Among People Younger Than 50 Years in the US, 2010 to 2019

Benjamin Koh1; Darren Jun Hao Tan1; Cheng Han Ng, MBBS2; et al

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2808381

Cancer has traditionally been considered a disease of older individuals (defined as adults 50 years and older),¹ but recent data suggest a marked increase in the incidence of cancer of various organs among patients younger than 50 years, collectively known as early-onset cancer.^{2,3}

These cancers affect a variety of organ systems, including the breast, colon and/or rectum, pancreas, head and neck, kidney, and reproductive organs.^{2,4-8}

The increase in early-onset cancers is likely associated with the increasing incidence of obesity as well as changes in environmental exposures, such as smoke and gasoline, $\frac{9}{2}$ sleep patterns, physical activity, microbiota, and transient exposure to carcinogenic compounds.¹⁰⁻¹⁴

Design, Setting, and Participants

This population-based cohort study analysed data from 17 National Cancer Institute Surveillance, Epidemiology, and End Results registries from <u>January 1, 2010, to December</u> <u>31, 2019</u>.

A total of 562 145 patients with early-onset cancer between 2010 and 2019 were identified and included.

Patterns in the Incidence of Early-Onset Cancers From 2010 to 2019, by Organ System

From 2010 to 2019, the greatest increases in the number of incident cases of early-onset cancer occurred:

- 1. Gastrointestinal system (14.80%; from 6431 cases to 7383 cases)
- 2. Breast (7.70%; from 11 745 cases to 12 649 cases)
- 3. Endocrine system (8.69%; from 5659 cases to 6151 cases).

Among gastrointestinal cancers, those with the fastest-growing incidence rates were in the appendix, intrahepatic bile duct and pancreas.

Conclusions and Relevance

In this cohort study, the incidence rates of early-onset cancer increased from 2010 to 2019.

By age group, the incidence rate of early-onset cancers increased in individuals aged 30 to 39 years and remained stable in other age groups younger than 50 years.

<u>Although breast cancer had the highest number of incident cases, gastrointestinal cancers</u> had the fastest-growing incidence rates among all early-onset cancers.

Among gastrointestinal cancers, those with the fastest-growing incidence rates were in the appendix, intrahepatic bile duct and pancreas (Annual Percentage Change 2.53%; 95% Cl, 1.69%-3.38%; *P* < .001).

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'Early detection saves lives'.

MCED (multi cancer early detection) testing is available at Asia HealthPartners.

As a screening tool, MCED investigates alterations that are found in the gene and detects the signals and location on where the cancer might have originated from.

If a cancer signal is present, the patient is recommended to consult their healthcare providers for further confirmatory testing.

It is recommended for use in conjunction with existing screening tools to bring clarity in early cancer screening.

About Asia HealthPartners

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At Asia HealthPartners we bring you the benefits and healthcare solutions that can only come from a combination of our medical expertise and technology with an emphasis on holistic medical care.

Our mission is to enrich the quality of our patients' lives through exceptional preventative, diagnostic and therapeutic medical services.

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Dr Chrystal Fong Chern Ying (MBBS Melbourne, FRACGP) is currently practicing as a family physician at Asia HealthPartners under the subsidiary of Singapore Institute of Advanced Medicine (SAM) Holdings, located at Lucky Plaza, Orchard, Singapore.

Dr Chrystal Fong is listed on the editors list of health screening providers on Health365, a healthcare, wellness and aesthetic medicine publishing agency in Asia. She has a special interest in health prevention and incorporates sports psychology and lifestyle medicine principles in her health screening and advocacy in health promotion.

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