13th Annual Cancer Survivorship Conference

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Cancer survivorship

Only a few decades ago, the prognosis (outlook) for people facing cancer was not nearly as favorable as it is today. During the 1970s, about 1 of 2 people diagnosed with cancer survived at least 5 years. Now, more than 2 of 3 survive that long. Today there are more than 14 million cancer survivors in the United States alone.
We must close the survival gap

A Brief History of Cancer Treatment

<table>
<thead>
<tr>
<th><strong>Surgery</strong></th>
<th>The Roman physician Celsus wrote, “After excision, even when a scar has formed, none the less the disease has returned.”</th>
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<tbody>
<tr>
<td><strong>Hormonal therapy</strong></td>
<td>Apart from surgical removal of the tumour, this is the oldest treatment still used in breast cancer. Its use was first reported in the Lancet in 1896, but not until the 1940s was it first assessed in randomised trials</td>
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<td><strong>Radiation therapy</strong></td>
<td>At the beginning of the 20th century, shortly after radiation began to be used for diagnosis and therapy, it was discovered that radiation could cause cancer as well as cure it.</td>
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<td><strong>Chemotherapy</strong></td>
<td>The era of cancer chemotherapy began in the 1940s with the first use of nitrogen mustards and folic acid antagonist drugs.</td>
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A Brief History of Cancer Treatment

**Blood and Marrow Transplant**

1968: World’s first successful human bone marrow transplant using an HLA matched sibling donor. The transplant is performed by Robert Good, MD, in an infant with an immune deficiency syndrome.

**Immunotherapy**

Apart from surgical removal of the tumor, this is the oldest treatment still used in breast cancer. Its use was first reported in the *Lancet* in 1896, but not until the 1940s was it first assessed in randomised trials.

**Targeted therapy**

The end of the 20th and beginning 21st Century brought the IMIDs, Mabs, TKIs, BTKi, ........, and the CARs
From sci-fi to you bedside
Late effects is an evolving field

• New treatments mean:
  • Potentially better outcomes
  • Change in short term side effect profile
  • Change on late effects

How to prevent and manage the scars of tissue damage
How to prevent and manage an overactive immune system
More is not necessarily better

THE GOLDSILCKS PRINCIPLE

PERFORMANCE

TIME

TRAINING STIMULUS

SUPERCOMPENSATION

NEGATIVE ADAPTATION

FITNESS BASELINE

RECOVERY

FATIGUE

TOO LITTLE

TOO MUCH

JUST RIGHT
When less is just fine...

• Breast cancer
• Children ALL
• Germ Cell Tumors
• Acute Promyelocytic Leukemia
• Chronic Myeloid Leukemia
Optimizing cancer treatment

• Cancer treat must involve a multidisciplinary team
• Cancer treatment is always best when done in a clinical trial
• Cancer treatment does not end at the completion of the planned therapy
Advancing cancer care through research

Better understanding of cancer biology in all stages
  • Better prevention
  • Better diagnosis
  • Better treatments
  • Better survival

To make this work it takes a lot of smart people
  • Smart scientist
  • Smart health care professionals
  • Smart PATIENTS
All of us can help improve cancer treatment outcomes...

How?

Engagement & Participation in Clinical Research
It takes a village

Enjoy the Conference!