

Spontaneous Remission:

The IONS SR Database

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Stubborn Paradigms

Do I really need to wash my hands?

- 174 years ago, 0% handwashing
- Ignaz Semmelweis
- Childbed fever → 18.3% mortality!
- Death of a friend... eureka?
- Phenomenon identified → hands washed → 0% mortality at 2 months.
- Ridiculed as 'improbable and unscientific'

Paradigm shifts taught in medical school...

- 1670s Van Leeuwenhoek's 'animalcules'
- 1847 Semmelweis' infection control
- 1854 John Snow and the 'Broad St outbreak'
- Anesthetics, antibiotics, vaccination/inoculation

5 Themes

- 1) Someone got curious about something odd
- 2) Novel theory based on direct observation
- 3) Broad skepticism
- 4) Everyone becomes a father
- 5) Improvements in *acute* care medicine

What about chronic diseases???

(CANCER, chronic viral infections, some chronic neurological conditions, many others)

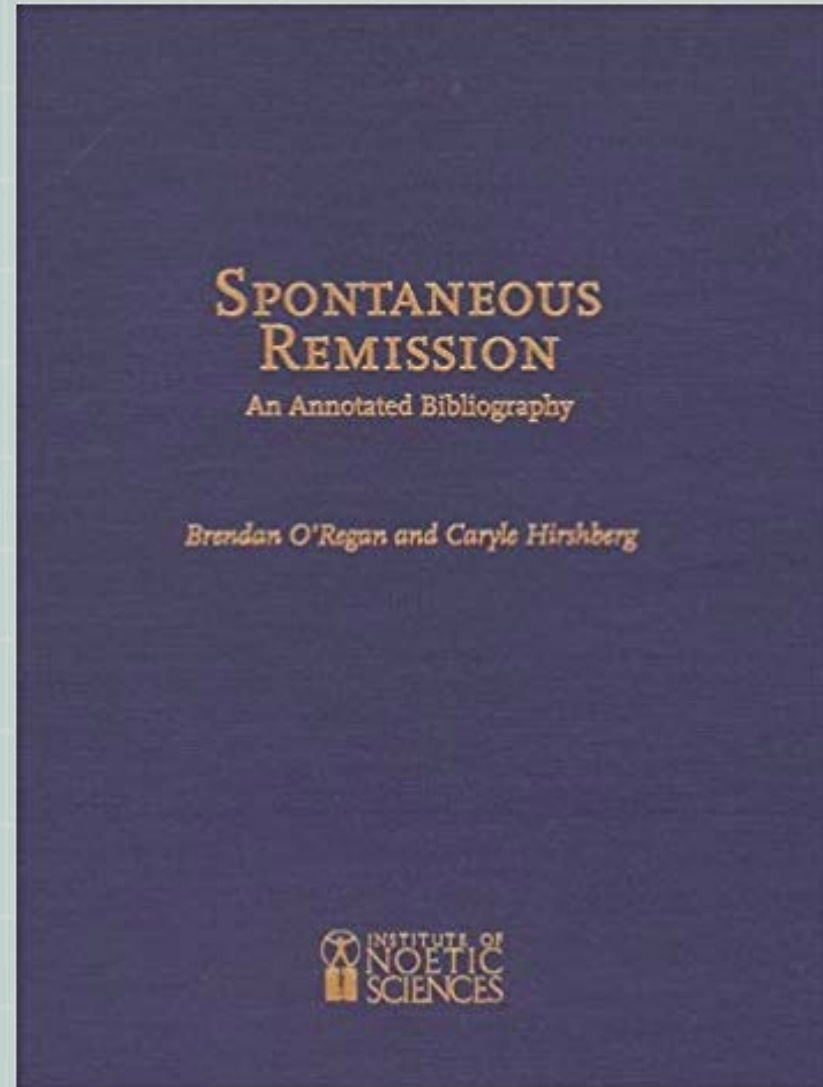
IONS to the rescue!

Curious about something odd?

- Sometimes cancer can mysteriously go away
- Definition of SR
- Frequency of SR...1 in 70 in placebo studies???
- What's the paradigm?
- What's the shift? → Treating some vs all cancers **differently**

How it all started

- Prior to 1993, 2 texts and an int'l conference on SR
- The need for consolidation and pathophysiological clarity led to IONS' SRaB, a 713-page textbook, published in 1993.
- Total cases of malignant cancer SR = 1372.



What did we learn?

- A multitude of non-standard treatment factors (including psychosocial) for cancer SR have been proposed
- A treasure trove of data, a new field of study?

Persistent problems:

- Under-reporting, under-reporting, under-reporting.
- Misdiagnosis remains an issue
- Natural history \neq SR

Evolution of IONS SR Database

- 3 additional IONS literature reviews and an online version
- MD involvement in SR research since 2012
- ~ 950 SR citations ID'd in 2012, and ~550 SR citations in 2018.
- What are we doing now?
- Final numbers caveat...

IONS SR Database

- First envisioned in 2012
- A complete overhaul of all previously reported data
- A hypothesis-driver – finally!
- Goal = Hypotheses → Hope

What do we know

- Immune-mediated, multiple phenomena
- Not all cancers are alike
- Three categories of SR
 - Known physical intervention/event
 - HCC, Storey et al 2011, Breast CA Dussan et al 2008
 - Known psychosocial factors
 - Frenkel et al 2011 – activism, altruism
 - Cunningham 2004 – Authenticity, autonomy, acceptance
 - Unknown
 - Most!

Thank you 😊