

File Hamilton Email 20-03-25

From: Chris Hamilton <chrisscotthamilton@gmail.com>

Sent: Wednesday, March 25, 2020 3:40 PM

To: Edward Calabrese <edwardc@schoolph.umass.edu>

Subject: Whole Lung RT Pneumonitis

Hello Prof Calabrese

I am an older oncologist from the UK and have a background as a practicing radiotherapist for 35 years and done a fair bit of clinical radiobiology including some low dose rate work. I trained under a few very old radiotherapists who practiced when RT was mostly benign and I have a basic knowledge of the history of RT.

I remembered that RT was used for paraquat interstitial pneumonia and for TB and a host of inflammatory diseases.

PubMed is pretty useless for anything pre 1960 and so when I found your 2013 summary paper I found the old data summarised very well. If the COVID pneumonitis is lymphocyte mediated **for absolute certainty whole lung RT even 50-100cGy will have profound effect with massive lymphocyte apoptosis within 24 hrs.**

Whether this will be good or bad who knows. It might induce a cytokine storm??

I find it persuasive from the personal testimony of early radiotherapists in your paper that low dose RT did work as an immunosuppressive agent

Colleagues in the UK quite understandably cite bias poor controls small series COVID is a different beast etc etc etc etc. These critiques are very true.... but these are tough times and many people are going to die. Giving 1-2 Gy whole lung to 20 patients will soon tell the story. It might kill them more rapidly.

It was done in 1930 when there was no choice...we have no choice now.

Has anyone raised this in US medical circles??

Chris Hamilton