

# Professor Seema Nagpal: which one should be given the priority, radiation or drug?

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## Editor's note

During August 17–18, the 1<sup>st</sup> CIMS International Medical Summit 2019 was successfully held in Beijing, China, with the focus on hot topics of obstetrics, lung cancer, gastrointestinal cancer, proton beam therapy, neuro oncology, neurosurgery and etc. During the conference, we are glad to interview Prof. Seema Nagpal, a neuro-oncologist from Stanford University, to share with her perspective on the brain metastasis (*Figure 1*).

## Expert's introduction

Seema Nagpal (*Figure 2*), MD, is a board-certified neuro-oncologist who treats both primary brain tumors as well as metastatic disease to the brain and nervous system. Her research concentrates on clinical trials for patients with late-stage central nervous system cancer. She has a special interest in leptomeningeal disease, a devastating complication of lung and breast cancers. She collaborates with Stanford scientists to detect this disease earlier, and with breast and lung oncologists to improve outcomes for patients.

## Interview (*Figure 3*)

*ATM: Having been studying in the field of brain metastasis for many years, what do you think are the critical issues facing the field right now?*

**Prof. Nagpal:** The first and most critical issue is to answer the question about timing of radiation for many of our patients. Now that we have good drugs to get into the nervous system, we don't know if we should radiate patients with brain metastases, then start the drug; Or if we should



**Figure 1** The picture of Prof. Nagpal and AME science editor.



**Figure 2** Prof. Seema Nagpal.



**Figure 3** Professor Seema Nagpal: which one should be given the priority, radiation or drug (1)?

Available online: <http://www.asvide.com/watch/33014>

start the drug and only use radiation as needed later.

*ATM: What sort of ongoing projects do you have in the area of brain metastasis? What can we expect?*

**Prof. Nagpal:** The biggest project I'm working on is figuring out how to use cell-free DNA testing in the central nervous system fluids (Cerebrospinal Fluid) like spinal fluid to see if I can change drugs earlier for patients.

*ATM: Could you share with us one of the most impressive case from your previous practices?*

**Prof. Nagpal:** I think the most impressive cases that I can remember involving patients with metastases on the coating of the brain and the spinal cord. Those patients can sometimes come in so sick that they're in the ICU. But if you start the correct tyrosine kinase inhibitor or medication for these patients, they actually can get better so fast that they get discharged from the ICU and even walk out of the ICU.

*ATM: How did you become involved in the research of brain metastasis, and how would you describe the particular challenges, setbacks, and successes you've encountered along the way?*

**Prof. Nagpal:** I'm very fortunate to work at an institution where I am right next to world experts on everything from lung to breast cancer. They came to me asking questions about their patients with brain metastases and where I could help. I found I didn't know enough to be as helpful as I would have wanted to be. Then I would go home and read more

and eventually became very involved in co-managing those patients; that in and of itself is the biggest challenge. Almost all of my patients have six or seven other doctors that I have to speak to before I make any treatment decisions. And I think one of the biggest setbacks for my patients and myself is that in clinical trials, my patients are often left out. Patients with brain metastases do tend to be sicker but companies are less interested in doing trials that include them. Therefore, one of my goals is to help companies put patients on study of brain metastases. To my delight, I think a big success is that I have convinced a company to at try to use their commercial test on cell-free DNA in the CSF, it may become available commercially for everyone to use if that is validated. And I think that will be a really big deal for our patients.

*ATM: Some suggestions for the young Neuro-oncologist?*

**Prof. Nagpal:** Neuro-oncology is a difficult field, which can take an emotional toll on providers. So I often tell our trainees to really focus on what they love to do in life, whether that's family or cooking or friends, and to spend time doing those things. Because if you don't do those things, you forget why your patients want to live so long. And then it's really hard to do your job.

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

### References

1. Zhou M, Zhou A. Professor Seema Nagpal: which one should be given the priority, radiation or drug? *Asvide* 2019;6:329. Available online: <http://www.asvide.com/watch/33014>

(Science Editors: Melissa Zhou, Angelia Zhou, ATM, [editor@atmjournals.org](mailto:editor@atmjournals.org))

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