



GUIDELINES FOR CANCER PATIENTS COVID VACCINATIONS AND COVID 19 TREATMENT PROTOCOLS.

Oncology

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ABSTRACT

For the vulnerable, Cancer patients The effects have been even more severe. The International Agency for Research on Cancer has recently updated its database to increase the number of new cancer cases. The after-effects of the pandemic may lead to delayed and accumulated diagnoses of new cancer cases, as well as occurrence of preventable cases, impacting on mortality in the coming years., Most trials of COVID-19 vaccines excluded patients with active malignancies, and thus data on the safety, tolerability and efficacy of the vaccines in patients with cancer are Currently limited. Henceforth formulating the policy of vaccination among cancer patients we need to understand both cancer biology as well as chain reactions occurs during Covid 19 disease progression at molecular level because once you find the biochemical parameters or markers in blood testing parameters disease both Covid 19 as well as Cancer reached to fairly advanced stage .

KEYWORDS

Covid 19, Cancer biology.

DISCUSSION –

Given the experience with prior vaccines, such as those against influenza23, no serious safety concerns are expected in patients with cancer. Moreover, the currently available vaccines do not contain functional corona virus and are, therefore, hypothesized to have no possibility of causing an active infection, even in immunosuppressed Patients .Given the risk posed by the COVID-19 pandemic, prompt decisions need to be made regarding the use of any vaccine, including those approved and/or authorized for use against SARS- CoV-2, in patients treated with investigational agents on clinical trials.

Molecular Level Of Covid 19 Disease Progression –

We know there are two phase of covid 19 disease progression, First one is viral phase which causes flu like illness it's not dangerous but after that Second phase start here viral action has already been done it's bad work now body start its response against various chemical induced body (lung) damage (Cytokinin Strom) which if remain uncontrollable leads to death.

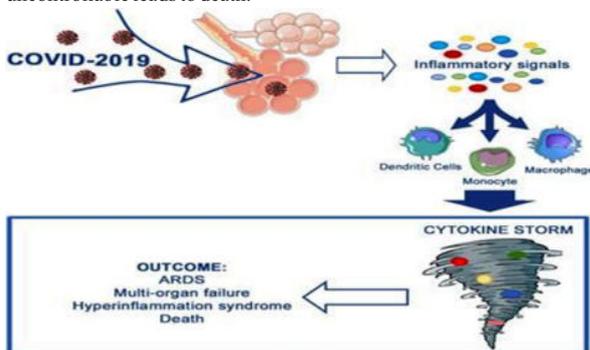


Figure-1 Covid 19 disease progression

Cytokine Storm and Multiorgan Failure-

Cytokine storm is considered to be one of the major causes of multiple-organ failure in COVID-19 infections. Excessive infiltration of the inflammatory cells like monocyte and neutrophil into lung tissue will lead to lung injury. Another source of damage to the lung is through cytokine-induced apoptosis of lung epithelial cells.

IFN- $\alpha\beta$ and IFN- γ induce inflammatory cell infiltration through two major mechanisms involving Fas–Fas ligand (FasL) or TRAIL–death receptor 5 (DR5) and cause the apoptosis of airway and alveolar epithelial cells.

This will lead to alveolar edema and hypoxia and hence cause acute respiratory distress syndrome (ARDS) . In cytokine storm, the following cytokine levels are elevated IL-1b, IL-2, IL-7, IL-8, IL-9, IL-10, IL-17, G-CSF, GMCSF, IFNg, TNFa, IP10, MCP1, MIP1A, and MIP1B , which are associated with the increased severity of the

disease , along with the development of ARDS and cardiac injury in patients with underlying heart problems .

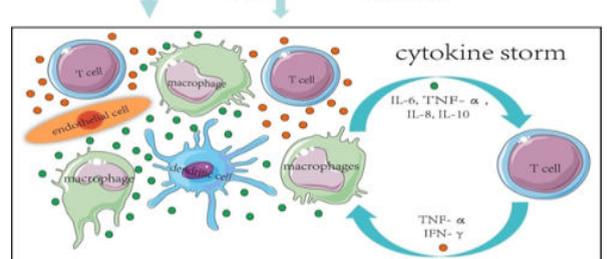
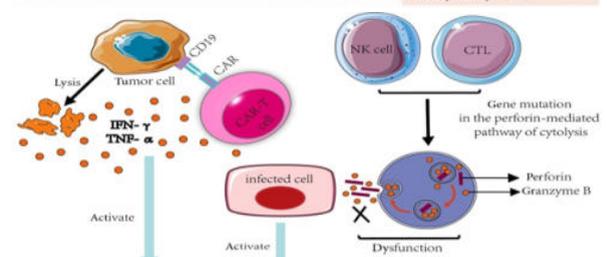
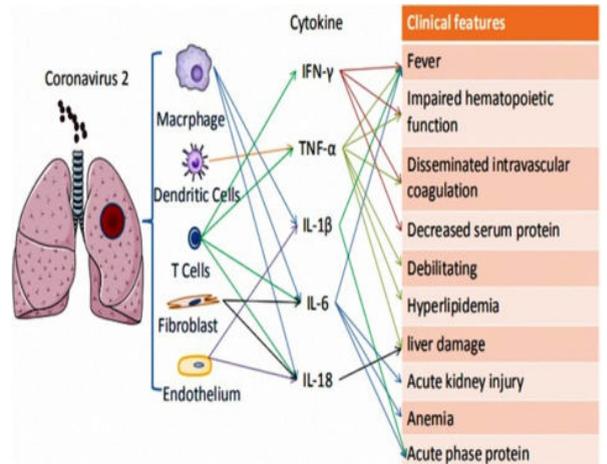


Figure2:- A and B- Cytokine storm phase

So can't we think of two very important drugs One is effective for First phase only that is Antiviral could be fabiflu could be Ramdisiver but for Second phase both above medicine not be effective in this dangerous phase steroid/ motelukost/ Bevasuzimab/ oral anticoagulants/ tocilizumab drugs may prevent death henceforth we can improve survival benefit in ICU patients.

CANCER PATIENTS AND COVID 19 VACCINATION CLEARIFICATIONS-



Figure.3 Indigenous vaccine, Covaxin and Covishield.

People with cancer (or with a history of cancer) can get some vaccines, but this depends on many factors, such as the type of vaccine, the type of cancer a person has (had), if they are still being treated for cancer, and if their immune system is working properly. Because of this, it's best to talk with your oncologist before getting any type of vaccine.

What are the side effects of the vaccines?

Common side effects that have been reported after getting the vaccines include:

- Pain, redness, or swelling at the injection site
- Feeling tired
- Headache
- Fever
- Chills
- Muscle and joint pain
- Nausea

For the vaccines that require two shots, the side effects might be a little stronger after the second shot compared to what you might have had after the first injection. In general, the side effects tend to go away within a few days.

Swollen/tender Lymph Nodes

Some people might have swelling or tenderness of the lymph nodes under the arm in which they got the injection. This is often a normal response by the body's immune system, which is getting ready to fight a future COVID-19 infection.

A swollen lymph node under the arm might cause concern, since this can also be a sign of breast cancer (as well as some other cancers - see below). The time it takes for the lymph nodes to shrink back down after the vaccine may be a few days to a few weeks, although this is still being studied. If you notice swollen or tender lymph nodes that do not go away after a few weeks (or if they continue to get bigger), contact your doctor to discuss the next steps.

Many expert medical groups recommend that most people with cancer or a history of cancer get the COVID-19 vaccine once it's available to them.

The main concern about getting the vaccine is not whether it's safe for people with cancer, but about how effective it will be, especially in people with weakened immune systems. Some cancer treatments like chemotherapy (chemo), radiation, stem cell or bone marrow transplant, or immunotherapy can affect the immune system, which might make the vaccine less effective. People with certain types of cancers, like leukemias or lymphomas, can also have weakened immune systems which might make the vaccine less effective. Since the situation for every person is different, it is best to discuss the risks and benefits of getting one of the COVID-19 vaccines with your cancer doctor. They can advise you and tell you when you should receive it.

Frequently asked queries-

1-I am a cancer survivor now not on any active cancer treatment can I get vaccinated - Answer yes you can take vaccine.

2-I am newly diagnosed with cancer can I take vaccine - Answer - must get vaccinated two weeks prior to start of active cancer treatment like chemotherapy or radiotherapy.

3-I have under gone cancer surgery can I get vaccinated - Answer get vaccinated 1 week prior to elective cancer surgery, but if you are going for Splenectomy surgery than get vaccinated two weeks prior to said surgery.

4- I am on chemotherapy can I get vaccinated - Answer yes but get your TLC Counts checked if found normal you can take vaccine.

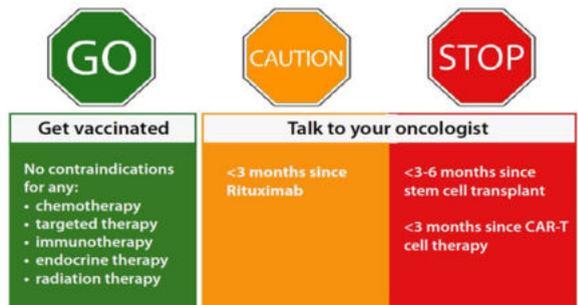


Figure.4- Cancer patients Covid 19 vaccine for different situations .

5- I am breast cancer patients presently on active treatment can get vaccinated - Answer yes if your counts are normal but remember do not get vaccine on the same side of arm you are having breast cancer, because vaccine sometimes cause axillary lymphadenopathy and breast cancer causes same to avoid confusion get vaccine in opposite arm that side you don't have breast cancer.

6- I am currently on steroid as a part of my cancer treatment can I get vaccinated - Answer Steroid decreases your immunity henceforth must consult your treating oncologist before get vaccine.

7- I am currently on hormone treatment can I get vaccinated - Answer yes you can be vaccinated.

8- I am on Immunotherapy for cancer treatment can I get vaccinated - Answer is you can be vaccinated.

9- I am currently under gone bone marrow transplant (BMT), Can I get vaccinated - Answer is yes but wait for three month after BMT to get recover fully from its side effects .

10- I am currently under leukemia cancer treatment can I get vaccinated - Answer yes but ensure your blood Neutrophils counts are normal.

11- I am currently under chemotherapy with low platelet count can I be vaccinated - Answer is yes but wait until your platelet count goes up to normal limit.

Cancer patients suffering from moderate category Covid19 disease, What Should be done We advise stop active cancer treatment and start treatment for Covid first after discussions with your institute medical specialist -

Currently We I Recommends Following Medications For Mild To Moderate Cases Of Covid Positive Ambulatory Cancer Patients -

COVID-19 (Moderate) Patients Important Medicines Kit

Covid Team 11 Group of Medicines

Advised

1. Tab. Calpal (Paracetamol) 650 - 1 BD x 5 days
2. Tab. Doxy (Doxicyclin) 100 - 1 BD x 5 days
3. Tab. Aarzin (Zink) 50 mg - 1 BD x 5 days
4. Tab. Azee (Azithromycin) 500 mg. - 1 OD x 3 days
5. Tab. Mectin (Ivermectin) 12 mg - 1 OD x 3 days
6. Cap. Calcitas D3 (Vit D3 60 k) - 1 Cap Stat
7. Tab. Medrol (Methylprednisolone) 16 mg - 1 BD x 5 days
- 8-Montair LC (Montelukast + levocetizine) - 1 BD x 5 days
9. Cap. Dabistar (Dabigatran Etexilatel) 75 - 1 BD x 5 days
10. Tab Rantac 150 mg - 1 BD x 5 days
- 11 Tab Vitamin C 500mg - 1TDS x 5 days

Note 7 No drug to be started after 6 th day of illness

Figure5- Cancer Patients With Covid Medications Basket

"The Doctors of UPAROI community in Utter Pradesh stands in solidarity with the various efforts to fight against second wave of Covid 19 pandemic."

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