

Title: Rabies Prophylaxis During Covid -19 Pandemic

Points to Remember

Author: Dr. M. K Sudarshan

MD (BHU), FAMS (HON'), FFPH (UK)

Keywords

Abstract Rabies Prophylaxis During Covid -19 Pandemic

- 1. Should we give rabies vaccines and immunoglobulins to animal bite cases if they have received COVID-19 vaccines recently?**

Yes; Post Exposure Prophylaxis is life-saving in all animal exposures for all age groups [1,7]. A complete course of vaccination and immunoglobulins/ monoclonal antibodies in category III exposure must be administered, even if they have received any dose of COVID-19 vaccine.

- 2. Can PEP and COVID-19 vaccine be given on the same day; if the circumstances necessitate?**

Yes; since both COVID-19 vaccine and the Post Exposure Prophylaxis is essential and lifesaving; it can be given on the same day, at different sites.

- 3. Can PrEP against rabies be given in risk individuals who have received COVID-19 vaccines recently?**

PrEP can be deferred based on individual risk assessment. PrEP may be initiated with a minimum gap of 2 weeks after complete course of Covid vaccination [2]. In the current context of Covid pandemic, Covid vaccination shall be prioritized to PrEP.

- 4. Is there any data on safety & immunogenicity of rabies vaccine co-administered with Covid vaccines.**

Currently, there is no data on safety & immunogenicity of rabies vaccine co-administered with Covid vaccines. However, the available evidence supports safe co-administration of cell culture vaccines i.e., rabies vaccine with other inactivated vaccines, such as DTP, JE and polio vaccines and also with live vaccine such as MMR vaccine [1, 3-6].

- 5. Can we give ID dose in the same arm where COVID-19 Vaccine was given IM?**

Other sites such as the suprascapular region and anterolateral thigh can be used for ID rabies vaccination [1]. This can also avoid the discomfort of multiple pricks on the same arm.

- 6. What will be preferred route of rabies vaccination (ID/IM); if they have received COVID-19 vaccines recently?**

There is no evidence currently to choose one route over the other. Hence, in Government hospital usually ID or in private facility IM. WHO recognizes the equivalent clinical effectiveness of both IM & ID route.

- 7. Does it require any dose adjustment for rabies vaccination (ID/IM) if they have received COVID-19 vaccines recently?**

No. The dosage is same irrespective of their age and body weight.

8. Is there any requirement to change the schedule of rabies vaccination after receiving COVID-19 vaccines recently?

No; The same schedules for both IM & ID as approved by DCGI/ NCDC has to be followed.

9. Can we give Inj. TT along with both the vaccines during these circumstances?

Yes; it has to be given at different site.

10. What about re-exposure cases after previous course of complete PEP/ PrEP?

Yes; since both COVID-19 vaccine and the Post Exposure Prophylaxis is essential and lifesaving; it has to be given as per the recommended schedule.

11. Should we give rabies vaccines and immunoglobulins to pet exposures if they have received COVID-19 vaccines recently?

If they have documentation of complete immunization of the pet; PEP can be deferred and observation of the dog/ cat for 10 days has to be done. If there is no proper vaccination of the pet, a complete course of vaccination and immunoglobulins/ monoclonal antibodies in category III exposure must be administered, even if they have received any dose of COVID-19 vaccine.

12. Is there a necessary to immediately start PEP for provoked stray animal exposure (if the animal seems to be normal and available for observation) if they have received COVID-19 vaccines recently?

Yes, Since the vaccination/ health status of the animal is unknown.

13. Which passive immunisation is preferred?

All of them i.e., HRIG, ERIG & RmAb are equally good and anyone can be given depending upon the affordability of the patient.

14. Is there any change in the volume of RIG/ RmAb infiltration if they have received COVID-19 vaccines recently?

No; The volume of RIG/ RmAb infiltration is as recommended by WHO/DCGI/NCDC; even if they have received COVID-19 vaccines recently.

15. Can rabies vaccines interchangeable (both brand/ route of administration) as per the availability for completing the course; if they have received COVID-19 vaccines?

Evidence suggests that changes in the rabies vaccine product and/or the route of administration should be allowed in unavoidable circumstances to ensure completion of PEP. PEP need not be restarted and the schedule of new administration route should be adopted.

16. What are the counselling points for such cases?

PEP should not be delayed. Entire schedule of PEP should be completed as advised, considering the serious nature of the disease. Covid appropriate behaviour (CAB) should be continued.

17. When should the second dose of COVID vaccine be scheduled, if the person is exposed to animals after the 1st dose?

Wherever feasible, the second dose of COVID vaccine should be scheduled at a minimum gap of two weeks after the last dose of rabies vaccine.

18. After receiving rabies vaccination, when can one take first dose of COVID Vaccine?

After a minimum gap of two weeks after the last dose of rabies vaccine [2].

19. Is there any need to test for vaccine-induced neutralizing antibody (VNA) for rabies vaccine co-administered with Covid vaccines.

Currently there is no evidence to suggest that it is required. The WHO specified minimum serum antibody concentration of 0.5 IU/mL is used as a measure of adequate seroconversion after vaccination. This level is reached by day 7–14 of a PEP regimen in most individuals, with or without simultaneous administration of RIG. Testing of VNA titres is not routinely recommended after PEP except in certain groups (e.g. HIV/AIDS, cancer, patients on chemotherapy or long term steroid therapy etc) after 2-4 weeks of vaccination [7]. However, patients/physicians may be encouraged to submit blood samples of individuals (who had concurrent Covid -19 and rabies vaccination) to NIMHANS for VNA testing 2 weeks after the last dose of rabies vaccine, on a voluntary basis. As a WHO CC, this will help us generate scientific data on this important issue.

20. Can a Covid-19 positive person in home isolation/care stay in contact with the pet dog or cat?

The dogs and cats can get infected with Covid-19 virus from Covid - 19 positive persons, but currently there is no evidence to suggest that it is transmitted further to humans (8). Hence, Covid-19 positive persons are advised to stay away from dogs and cats.

References:

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