Peer Review File

Article information: https://dx.doi.org/10.21037/amj-22-13

Reviewer A

#1. Please show her past medical history. Was she a completely healthy woman in her 40s? Did she get the booster vaccination? If so, what happened after the vaccination?

The patient had a history of ovarian cyst and chronic anemia. We added the sentence "She underwent resection of an ovarian cyst in her thirties. She also has chronic anemia, and her blood hemoglobin count was around 7.0g/dl." in the case presentation section, as advised (see Page 5, line 11). It would be very interesting but she did not receive a booster vaccination within the period of outpatient treatment in our hospital. We added the sentence "She did not receive a booster vaccination within the period of outpatient treatment in our hospital." in the case presentation section, as advised (see Page 7, line 8).

#2. Why did the biopsy result in an inadequate specimen? You should have used on-site rapid diagnosis and repeated biopsies. Distinguishing between benign and malignant lymphadenopathies is very important. Or you diagnosed it as benign at this moment in your mind, didn't you?

I strongly agree with the reviewer's opinion about the value of on-site rapid diagnosis. However, an on-site rapid diagnosis by a pathologist or cytotechnologist is not available in our institute. The CT-guided biopsy was performed by a doctor of nuclear medicine and we could not attend the biopsy because of other operation. We suspected both malignancy and benign disease, so we planned surgical biopsy as next step.

#3. In this case, the follow-up CT scan performed 32 days after the vaccination revealed that the anterior mediastinal mass had become even smaller (from 66 mm to 32 mm in diameter). After you failed to obtain the accurate pathological diagnosis, why did you move on to a re-biopsy or thoracoscopic biopsy immediately?

We still suspected both malignancy and benign disease after tumor shrinkage, because some types of thymic tumor shrink spontaneously. We wanted to exclude such tumor, so we planned surgical biopsy as next step.

#4. Fortunately, the lymphadenopathy vanished spontaneously. The authors believe that an immune response resulting in transient thymic hyperplasia was more plausible. But, why did the very rare phenomenon happen in a completely healthy woman?

As the reviewer mentioned, the reason is unclear. Unfortunately, it is very difficult for us to explain the mechanism at this time.

#5. In line 32: You mentioned "preoperative CT". Did you perform any surgery?

We rephrased as "CT scan prior to surgical biopsy" in the abstract section, as advised (see Page 3, line 13).

Reviewer B

The type/brand name of vaccination should be mentioned at least once so readers can easily know which vaccine the patient received.

We added the brand name as "mRNA-1273 SARS-CoV-2 vaccination (Moderna)" in the case presentation section, as advised (see Page 5, line 10).

Also, possibly a brief discussion on if other types of vaccines (viral vector) have any known similar reports.

We added discussion about difference between mRNA vaccine and vector vaccine as follows, in the discussion section, as advised (see Page 9, line 7):

"A recent report showed that axillary lymphadenopathy evaluated by ultrasound was seen more frequently after mRNA based vaccine compared to viral vector vaccine."

Reviewer C

Please mention more features of CT findings that will help differentiate different types of anterior mass including the density, fat proportion, composition, etc. This will be helpful in the abstract as well.

As pointed out by the reviewer, it is useful to distinguish between a benign and malignant disease based on CT image. Unfortunately, there was no specific radiological feature other than those we mentioned in the manuscript. We added the sentence in the case presentation section, as advised (see Page 6, line 10):

"There was no specific radiological feature that allowed differentiation between benign and malignant mediastinal mass."

Also, it does not clarify presenting symptoms and duration that lead the primary team to do a CT scan.

Whereas she was no symptom and her temperature decreased, chest CT performed by primary team to explore the cause of prolonged fever; 13 days after vaccination.

We added the sentence in the case presentation section, as advised (see Page 5, line 17):

"Although she had no other symptoms and her temperature had decreased, chest computed tomography (CT) was performed to explore the cause of prolonged fever; 13 days after vaccination."