



ORIGINAL ARTICLE



Herpes Zoster Infection During Covid 19 Pandemic: a case- series study, Baghdad, Iraq

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Abstract

Introduction: The risk of Covid 19 is still high in Iraq because of relatively low percent of population were vaccinated, and the non-stop periodic appearance of SARS-Cov2 strains. The immunocompromised and elderly people have high risk to get Herpes zoster infection which could lead to irreversible complications if not treated well. **Objectives:** This study aims to find the occurrence of Herpes zoster cases after recovery from Covid 19 infection, and to show the possible common factors between them. **Methods:** It is a case – series study that was carried out in a private clinic in Baghdad, Iraq for six months, included cases of Herpes zoster that occurred after their recovery from Covid 19 positive- PCR tests. Diagnosis, investigation, and treatment of them were done. **Results:** All the patients appeared to manifest the clinical features of Herpes zoster infection two to eight weeks after their recovery from Covid 19. All of them had lymphopenia, half of them had mild increase in their erythrocyte sedimentation rate, and quarter of them had mild anemia. **Conclusions:** Although the association between both diseases is not well known, the persisting Covid 19-related lymphopenia appeared to be likely a predisposing factor for a possible relation. So it is important to bring an attention on occurrence of Herpes zoster after recovery from Covid 19, because the early diagnosis and treatment can prevent the complications of Herpes zoster, and to give varicella zoster vaccine for risky patients which could also prevent that infection and its complications.

Keywords: Herpes zoster, Covid 19, Varicella zoster, Coronavirus pandemic

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1 | INTRODUCTION

Since February 2020, Iraq had severely affected by Covid 19 which is caused by SARS CoV2 virus. Its risk is still high in this country mainly because of relatively low percent of population were vaccinated, and also because of the non-stop periodic appearance of new virus strains. Covid 19 is associated with numerous, different cutaneous manifestations. Herpes zoster infection is a manifestation of the reactivation of latent varicella zoster virus infection, which is responsible also for the initial presentation of the viral infection (chickenpox). Patients at risk of Herpes zoster include elders and immunocompromised. If not well treated, it is often complicated by chronic pain (post-herpetic neuralgia), cranial nerve palsies, zoster paresis, vasculopathy, meningoencephalitis, cerebellitis, myelopathy and multiple ocular disorders. Herpes zoster infection has been rarely described in patients with Covid 19. Some reports suggested that Herpes zoster could be a possible complication of Covid 19, but still there are limited reports confirm an association between them. In this regard, the study aims to find the occurrence of Herpes zoster cases after the recovery of Covid 19, to raise the awareness about it in order to minimize its complications (by early diagnosis and good management), and to show the possible common factors among cases of Herpes zoster that occurred after Covid 19 recovery.

2 | METHODOLOGY

A case – series study was carried out in a private clinic in Baghdad, from December 2020 to May 2021, included four cases of Herpes zoster infection that occurred after their recovery from Covid 19 positive- PCR tests, three of them were females and one was a male. Clinical diagnosis and blood investigation were done for those cases, included White blood cells count, Erythrocyte sedimentation rate, and Hemoglobin level. The date of Covid 19 recovery and the date of attendency to the clinic were determined. All the cases were given the same treatment, which was a course of Acyclovir 800mg tablets, five times daily for ten days.

3 | RESULTS

Case 1: A female with age of 29 years, had symptomatic Covid 19 – PCR positive in December 2020. She was presented to the clinic in the last week of December (i.e one week after recovery) with lower abdominal herpes zoster lesions. The laboratory findings of her showed a normal Erythrocyte sedimentation rate (ESR) and lymphopenia (3,100 lymphocytes/microliter). The patient was successfully treated with acyclovir tablet.

Case 2: She was a 71 years old female, who had symptomatic, positive PCR for COVID-19 in February 2021. She attended the clinic in April 2021 (seven weeks after recovery) with thoracic herpes zoster lesions. The laboratory findings of her showed a mild increase in Erythrocyte sedimentation rate (ESR) (18 mm/h), mild anemia (Hb: 10.7 g/dL) and lymphopenia (2,800 lymphocytes/microliter). The patient was successfully treated with acyclovir tablets.

Case 3: A male who was aged 64 years, had symptomatic, positive PCR for COVID-19 in April 2021. He presented to the clinic in June 2021 (eight weeks after recovery) with thoracic herpes zoster lesions. The laboratory findings showed a mild increase in Erythrocyte sedimentation rate (ESR) (32 mm/h) and lymphopenia (2,210 lymphocytes/microliter). He was successfully treated with acyclovir tablets.

Case 4: A female aged 44 years, had symptomatic, positive PCR for COVID-19 in April 2021. She attended the clinic in May 2021 (five weeks after recovery) with shoulder herpes zoster lesions. The laboratory findings showed a normal Erythrocyte sedimentation rate (ESR) and lymphopenia (2,970 lym-

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phocytes/ microliter).The patient was also successfully treated with acyclovir tablets.

4 | DISCUSSION

The occurrence of Herpes zoster infection (its incidence) in Iraq and worldwide might be underestimated. It could be manifested during Covid 19 pandemic, approximately one to two weeks after the onset of symptoms. In many cases (21%) the course of herpes zoster was complicated with neuralgia. Doctors have to be aware of this relation in the weeks following recovery from Covid 19, in order to ensure early diagnosis and prompt treatment of herpes zoster. Moreover, since herpes zoster infection is a cause of considerable morbidity, especially in elderly or critically ill patients, one may propose varicella zoster vaccination for fragile patients, in order to boost cell-mediated immunity. Theoretically, this may prevent the reactivation of latent infection following Covid 19.

5 | CONCLUSIONS

1. Cases of Herpes zoster appeared to occur relatively within short duration after recovery from Covid 19; between two to eight weeks.
2. Although the association between Herpes zoster and Covid 19 is not well known, the persisting lymphopenia that is related with Covid 19 appeared to be likely a predisposing factor for a possible relation.

6 | RECOMMENDATIONS

1. Bring an attention on occurrence of Herpes zoster infection after recovery from Covid 19, because the early diagnosis of Herpes zoster with good manage-

ment can prevent the complications.

2. Vaccination with varicella zoster vaccine for risky patients, after their recovery from Covid 19 infection could also prevent Herpes zoster infection and its complications.
3. Other studies are needed to look for a relation between these two diseases.

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