Association study between herpes zoster reporting and mRNA COVID-19 vaccines (BNT162b2 and mRNA-1273)

Laure-Hélène Préta[1], Adrien Contejean[1], Francesco Salvo[2], Jean-Marc Tréluyer[3], Caroline Charlier[1], and Laurent Chouchana[4]

[1]Assistance Publique - Hopitaux de Paris
[2]Université de Bordeaux
[3]Affiliation not available
[4]Hospital Cochin

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Abstract

Several cases of herpes zoster (HZ) following mRNA COVID-19 vaccination (BNT162b2 and mRNA-1273) have been reported, and first epidemiological evidences suggest an increased risk. We used the worldwide pharmacovigilance database VigiBase to describe HZ cases following mRNA COVID-19 vaccination. We performed disproportionality analyses (case/non-case statistical approach) to assess the relative risk of HZ reporting in mRNA COVID-19 vaccine recipients compared to influenza vaccine recipients and according to patient age. Until 30th June 2021, of 716,928 reports about mRNA COVID-19 vaccines, we found 7,728 HZ cases. When compared to influenza vaccines, mRNA COVID-19 vaccines were associated with a significantly higher reporting of HZ (reporting odds-ratio 1.9, 95%CI [1.8-2.1]). Furthermore, we found a reduced risk of reporting HZ among under 40 year-old persons compared to older persons (reporting odds-ratio 0.39, 95%CI [0.36-0.41]). For the first time, we could assess at a global level the risk of HZ after mRNA COVID-19 vaccination.

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