Omicron

- The Spectrum and Burden of COVID-19-Associated Neurologic Disease in Australian Children 2020-2023
- Epidemiology and Clinical Characteristics of Laboratory-Confirmed COVID-19 and Influenza Infections in Children: A 2015-2024 Study in Taiwan
- Difference in clinical courses and causes of COVID-19-related deaths in hospitalized patients infected with omicron and delta variants: A retrospective study in Japan
- Predictive Insights Into Bioactive Compounds from Streptomyces as Inhibitors of SARS-CoV-2 Mutant Strains by Receptor Binding Domain: Molecular Docking and Dynamics Simulation Approaches
- A Cross-Sectional Study Revealed a Low Prevalence of SARS-CoV-2 Infection among Asymptomatic University Students in Tripoli, North Lebanon
- SARS-CoV-2 antigen rapid detection tests: test performance during the COVID-19 pandemic and the impact of COVID-19 vaccination
- Effectiveness of Lianhua Qingwen Granule and Jingyin Gubiao Prescription in Omicron BA.2 Infection and Hospitalization: A Real-World Study of 56,244 Cases in Shanghai, China
- Scientific integrity in the era of predatory journals: Insights from an editors in chief symposium

 Omicron Variant and Neurosurgery: Practical Insights

 1. Omicron’s Clinical Profile High transmissibility, but generally causes milder illness compared to previous variants (e.g., Delta).

Shorter incubation period (~2-3 days).

Fewer cases requiring ICU or mechanical ventilation, but sheer case volume still strained hospitals.

Less frequent loss of smell/taste, more upper airway symptoms (sore throat, congestion).

 2. Surgical Protocol Adjustments (Omicron Wave) Elective surgeries resumed earlier compared to previous waves, thanks to:

High levels of vaccination and natural immunity.

Lower ICU occupancy per case.

Continued:

Pre-op PCR or antigen testing, though some centers reduced it depending on local policy.

N95 masking and PPE, especially during high community transmission.

 3. Impact on Neurosurgical Services Staffing shortages from widespread mild illness among healthcare workers.

Shorter isolation times allowed faster return to work, but still disrupted rotas.

Patient no-shows and delayed presentation increased for both elective and semi-urgent cases.

 4. Specific Neurosurgical Risks Endonasal surgery remained higher risk due to viral load in the nasal cavity, even in Omicron.

Patients with neuro-oncology needs or chronic neurosurgical disorders (e.g., hydrocephalus, spine disorders) still faced care delays, with indirect morbidity.

 5. Neuro-COVID with Omicron? Fewer reports of severe neurological manifestations (e.g., stroke, encephalopathy) compared to Delta.

Possible explanations:

Less systemic inflammation.

Higher prior immunity in the population.

Still, cases of long COVID and cognitive fog persisted.

 6. Teaching and Recovery Phase Omicron helped normalize surgical training, simulation, and resident rotations.

Return to hybrid models of education, mixing on-site and remote learning.

Growing focus on resilient systems, infection control, and digital tools.