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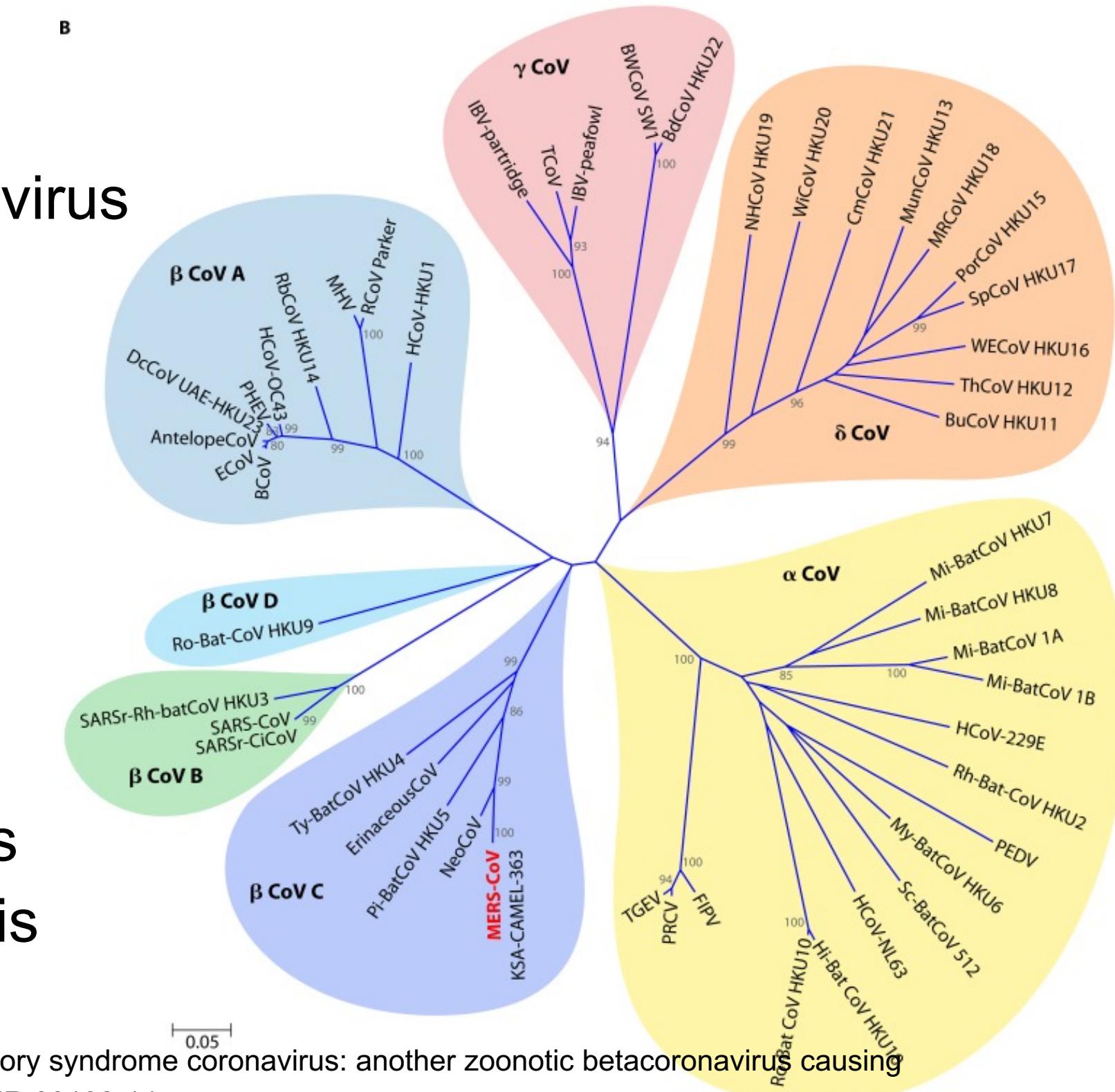
COVID-19: ENT SYMPTOMS

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CORONAVIRUS PANDEMICS (WHO)

- Severe Acute Respiratory Syndrome (SARS-CoV) → 2002-2003
- Middle East Respiratory Syndrome Coronavirus (MERS-CoV) → 2012
- Novel coronavirus 2019 (COVID-2019)
- Endemic subtypes:
HCoV-229E, -OC43, -NL63 and -HKU1
→ 15–30% upper respiratory tract infections
= rhinitis, laryngitis/pharyngitis and otitis



Chan JF, Lau SK, To KK, Cheng VC, Woo PC, Yuen KY. Middle East respiratory syndrome coronavirus: another zoonotic betacoronavirus causing SARS-like disease. *Clin Microbiol Rev.* 2015;28(2):465–522. doi:10.1128/CMR.00102-14

Desforges M, Le Coupanec A, Dubeau P, et al. Human Coronaviruses and Other Respiratory Viruses: Underestimated Opportunistic Pathogens of the Central Nervous System?. *Viruses.* 2019;12(1):14. Published 2019 Dec 20. doi:10.3390/v12010014

GENERAL SYMPTOMS

- Fever
- Cough (> dry)
- Shortness of breath
- Malaise

ENT SYMPTOMS

SYMPTOM	MERS-CoV	SARS-CoV	COVID-19
SORE THROAT	21%	23%	5-8%
RHINORRHEA	4-11%	2-24%	4%
OTITIS, HEARING LOSS	?	?	?
VERTIGO	?	?	?
SINUSITIS	?	?	?

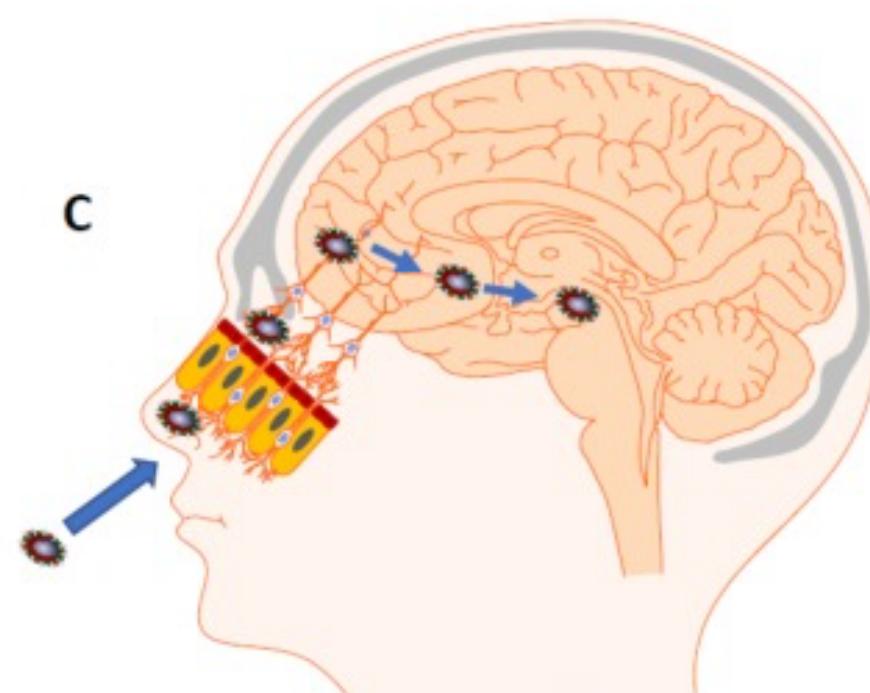
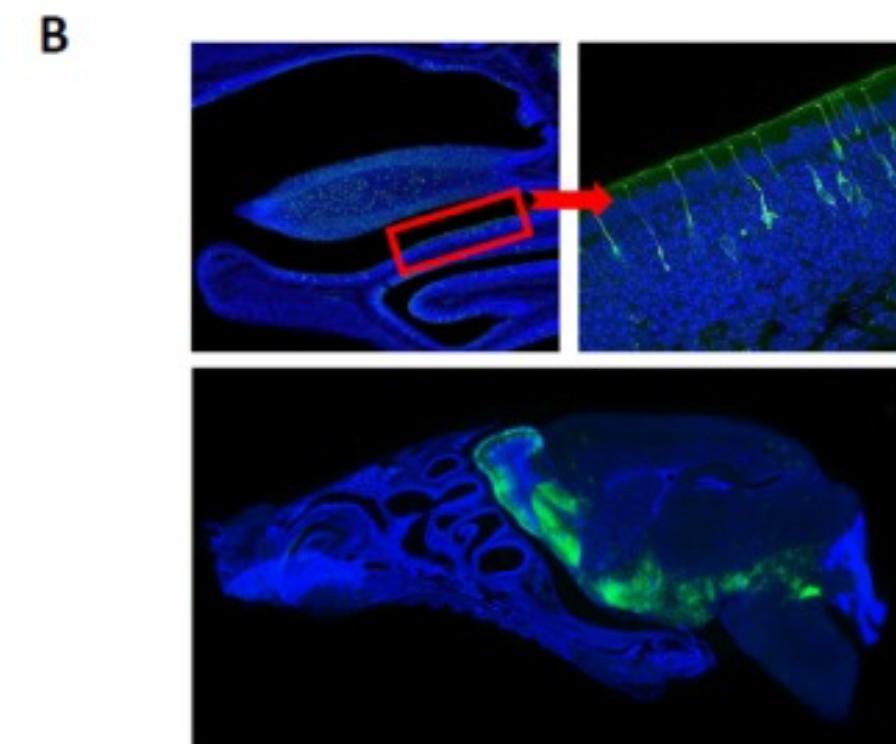
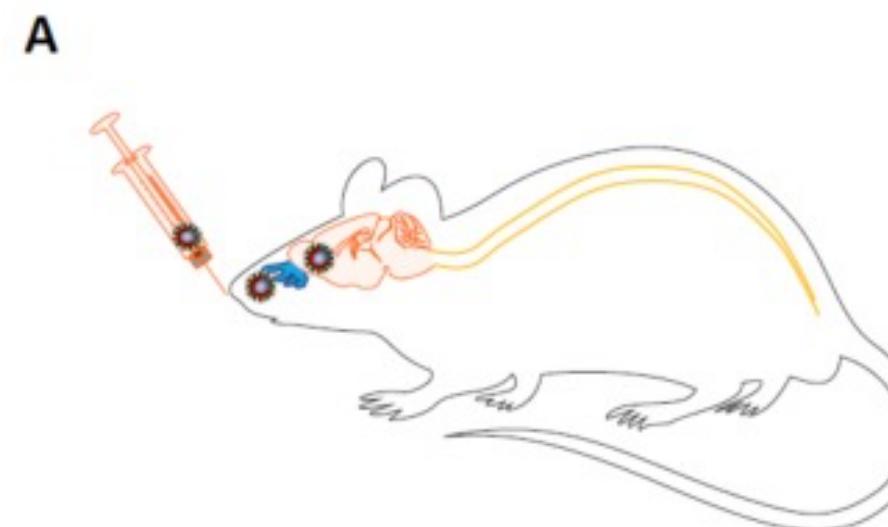
CLINICAL ENT EXAMINATION IN SARS

- Sore throat
- Rhinorrhea
- Referred otalgia (3%)
- No lymphadenopathy
- Pharyngeal wall: dry aspect, no hyperemia

COVID-19 VS INFLUENZA

- ~ fever, cough, chills, myalgia, and diarrhea
- Children with SARS:
 - < rhinorrhea (7% vs 93%)
 - < sputum production (7% vs 53%)
 - < sore throat (20% vs 60%)
- Inflammation in ENT → SARS < Influenza

COMPLICATIONS COVID-19



- Pneumonia 100%
- ARDS 29%
- Acute liver injury 14-53%
- Cardiac injury (arrythmia, myocarditis) 12%
- Secondary infection 10%
- AKI 3-8%
- CNS invasion → encephalitis, paresis, Guillain-Barré, ...
- ...

PREVENTION ENT DEPARTMENT WEST-CHINA

- Separate waiting room and treatment area
- Reduce number of appointments
- More online / phone consultations
- Ensure adequate anesthesia to reduce sneeze reflex
- Local anesthetic spray → gel anesthesia
- Smallest possible diameter laryngoscope