COVID Primer

For the class of 2020 May 28 2020 Dr. Bonnie Henry, Dr. Josh Williams, Dr. Katie Wiskar, Dr. Naisan Garaway, Dr. Gillian Fyles and Dr. Ross Taylor



Tips for this Session:

- Questions can be submitted to www.slido.com. Event code # T115
- Appropriate questions will be accepted by the moderator can then be up-voted.
- Please vote for questions for each of the speakers/topics.
- Student moderators will present the most favoured questions for each of the speakers.
- At the start of your question, please indicate to whom or what discipline your question is directed.



Dr. Bonnie Henry & Dr. Josh Williams



COVID-19 ED Primer

May 28/2020 Josh Williams MD, FRCPC @361Joules

Objectives

- 1. Understand the clinical picture of COVID-19 presenting to the ED
- 2. Know how to protect yourself and your colleagues
- 3. Be able to describe and interpret common investigations used in the workup of a patient with suspected or confirmed COVID-19
- 4. Understand the rationale for admission or discharge in this setting

Clinical Presentation

- Fever
- Cough
- Shortness of breath
- Chest pain
- Malaise
- Rhinorrhea
- Fatigue
- Sore throat
- Nausea/vomiting/diarrhea

- Asymptomatic!
- Triage to 'hot' vs. 'cold' zones
- Links to known cases/outbreaks

Protect Yourself

- COVID-19 is generally spread in large droplets
- Aerosol Generating Medical Procedures
 - ► >15L/min O_2 by facemask
 - CPAP/BiPAP
 - Intubation/extubation
 - Nebulized medication delivery
 - Suctioning
 - **CPR**
- PPE recommendations vary by Health Authority and by province









ED Workup

- Nasopharyngeal swab
- O2 sat
- ► +/- CXR

- CBC/lytes/renal function/glucose
- VBG/ABG/lactate
- Blood C&S
- CRP
- LDH
- D-dimer
- Troponin
- Sputum C&S or ETT aspirate



WBC (N)
Lymphocytes ↓
D dimer ↑
CRP ↑
LDH ↑



Disposition - Home

\bullet O₂ sat

- >94% on room air
- At baseline
- No significant change with activity
- Other VS WNL
- Safe social set up
- At baseline function
- No significant ↑ WOB
- Able to self-isolate

Disposition - Critical Care?

- Hypoxemic despite standard O2 therapy
- Requirement for HFNO or CPAP/BiPAP
- Rapidly progressive deterioration
- Co-existing MOF, ALOC, or hemodynamic instability
- Clinician judgement

Summary

High index of Suspicion
Personal Protection
Adequate Oxygenation
Admission vs. Home Isolation

Dr. Katie Wiskar

1110





COVID-19: Internal Medicine Perspective

Katie Wiskar, MD FRCPC May 28 2020

Outline







EMERGENCY ROOM: ADMISSION CONSIDERATIONS

WARD MANAGEMENT

DISCHARGE PLANNING

ED: Admission Considerations



Serial testing

- Our current test (PCR of NP swab) is IMPERFECT
 - 60-80% sensitivity in most reports
- Contributing factors
 - Imperfect swab technique
 - Virus not predominantly present in upper respiratory tract
 - Phase of illness: very early OR post-viral replication phase
- Pre-test probability is KEY
 - Low PTP: one swab ok to rule out
 - Moderate/high PTP: will need repeat testing and continued isolation
 - And consider adjunctive testing: sputum PCR, CT chest, POCUS, etc
- Have this discussion with your senior/fellow/staff BEFORE you admit the patient!

Inpatient ward management

or creation	ORDERS	
	COMPLETE OR REVIEW ALLERGY STATUS PRIOR TO WRITING ORDERS	
	COVID-19 (SUSPECTED OR CONFIRMED) ADMISSION ORDERS (items with check boxes must be selected to be ordered)	(Page 1 of 1)
Date:		Time
Avoid unnece	ssary imaging, medications and frequent lab work. Minimize patient transportation.	RN/LPN Initial Comments
ADMISSION INS	STRUCTIONS: Admit under Dr.	
CODE STATUS	: Refer to completed Medical Orders for Scope of Treatment (MOST) form	
PATIENT ISOL	ATION: Droplet and Contact precautions, use appropriate eye protection. Use Airborne precautions with aerosol-generating medical procedures (refer to ipac vch.ca)	
DIET:	Regular or	
ACTIVITY:	Activity as tolerated	
CONSULTS:	Do not place Allied Health Consult order without confirmation from MRP	
MONITORING:	Vital signs Q8H and PRN Q6H and PRN Q4H and PRN	
	Pulse oximetry Q8H and PRN Q6H and PRN Q4H and PRN	1.1.1
LABORATORY	: CBC and Differential, serum creatinine, urea, electrolytes, glucose, CRP and ferritin level daily x 3 days INR, PTT, Fibrin D-Dimer, LDH and liver panel (bilirubin total, albumin, ALP, ALT and GGT) daily x 3 days If not already done in ED, obtain troponin and lactate level	
	magnesium level phosphate level calcium level	
	☐ If not already done, nasopharyngeal swab for COVID-19 n-Coronavirus NAT, Influenza A/B and RSV NAT (use a single swab and send for both influenza and COVID-19)	
	Sputum for COVID-19 n-Coronavirus PCR	
	Blood culture x 2 Sputum C&S	
DIAGNOSTICS:	It not already done in ED, obtain electrocardiogram 12-lead	
IREATMENTS:	I lirate U2 to maintain oxygen saturation 92% or greater "UR"%.	
	High flow O ₂ requires airborne precautions	
	If/when patient requires 4 L/min of O_2 by nasal prongs to keep SpO ₂ above 93%, call MRP and CCOT.	
	If/when patient requires 6 L/min of O ₂ by nasal prongs to keep SpO ₂ above 93%, call MRP. MRP to consult ICU if patient is full code.	
INTRAVENOUS	: Insert peripheral IV catheter	
MEDICATIONS	Use fluids judiciously – allow relative hypotension in absence of worsening shock.	
	 NSAIUS, ACEIS, ARBs and prednisone should be initiated with caution; however, if on prior to admission, these medications can be continued if indicated. 	11
	 Supply of bronchodilators is limited. Order selectively for appropriate indications (e.g. wheezing). Nebulized medications can be administered if patient is in single room with door closed, or dedicated COVID ward with personnel wearing appropriate Personal Protective Equipment (PPE). 	
	 acetaminophen 975 mg PO QID PRN pain or fever (Max acetaminophen 4 g/ 24 h from all sources) acetaminophen 325 mg PO QID PRN pain or fever (Max acetaminophen 2 g/ 24 h from all sources) ondansetron 4 to 8 mg PO/IV Q8H PRN nausea or vomiting 	
	Pharmacy to initiate Bowel Protocol – MEDICINE (#19) PRE-PRINTED ORDER	1.1
VTE Pronhylavi	is: Complete VTE Risk Assessment and Prophylaxis Pre-Printed Order #761	





Management is largely supportive

- Treat hypoxemia: supplemental O₂
 - Awake proning: avoid prolonged supine position
- Treat symptoms
 - Analgesics, antipyretics, antiemetics
- Antivirals and targeted therapies: use in the context of clinical trials
 - Hydroxychloroquine/chloroquine
 - Remdesivir
 - Lopinavir/ritonavir +/- ribavirin and interferon
 - Other: tocilizumab, convalescent plasma, zinc, vitamin D...
 - Steroids: not *routinely* recommended; timing is important¹
 - Used more in: ARDS, sepsis, critical illness, hyperinflammation
- Treatment of complications

- 1. doi: 10.1111/jth.14768
- 2. doi: <u>10.1111/jth.14888</u>
- doi:<u>10.1007/s00134-020-06062-x</u>
- 4. doi:<u>10.1016/j.thromres.2020.04.013</u>



Illness trajectory is key



https://covidviruswatch.wordpress.com/



Monitoring on the ward

- Illness trajectory is key
- Trying to catch those who are deteriorating and entering phase IIb or phase III
 - Immune hyperactivation/HLH-like phenomenon
- Pre or post-ICU?
- Regular labs useful
 - Inflammatory panel q2d (variable)
 - Ferritin, CRP
 - D-dimer, fibrinogen, INR
 - Liver enzymes
 - Troponin



Manage complications

- Hypercoagulability
- Immune hyperactivation/cytokine storm
- Cardiac injury
- Secondary bacterial infection
- AKI
- Delirium
- Deconditioning



Hypercoagulability

- COVID-associated coagulopathy
 - Primarily VTE (bleeding seems to be much less common)¹
- Frequency
 - 25-43% in critically ill patients²⁻⁴
 - Seems much lower in ward patients (4% in one study)²
- Labs: D-dimer, INR, fibrinogen
- Monitoring: clinical
 - No role for screening US/CT scan
- Treatment
 - DVT prophylaxis for ALL (unless an extremely good reason)
 - Some hospitals using higher dose (eg Enox 30 BID)
 - Confirmed VTE: full dose AC (heparin/LMWH typically at first)
 - Involvement of Hematology

- 1. doi: 10.1111/jth.14768
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Immune hyperactivation/cytokine storm

- Dysregulated immune response with similar labs/pathology to HLH^{1,2}
- Elevated inflamm. markers, clinical deterioration: shock, ARDS, MOF
- Often hand-in-hand with hypercoagulability
- Treatment
 - Call your friendly local Hematologist/HLH expert!
 - Steroids: higher doses seem to be needed
 - Tocilizumab? Maybe helpful in the right subset of patients³⁻⁴
- Predictor of mortality

- 1. doi: <u>10.1016/S0140-6736(20)30628-0</u>
- 2. doi: <u>10.1016/S0140-6736(20)30183-5</u>
- 3. <u>https://www.aphp.fr/contenu/tocilizumab-improves-</u> significantly-clinical-outcomes-patients-moderate-orsevere-covid-19
- 4. doi: 10.1101/2020.04.20.20061861

Cardiac injury

- Fairly common: 12.5% to 38% depending on population studied¹⁻⁴
- Presents with
 - Elevated troponin/BNP⁵
 - EKG: most commonly non-specific ECG changes⁶
 - Echo: several abnormalities may occur (myocarditis/CMO picture)⁶
- Treatment?
 - Troponitis: treat as type 2 ischemia
 - Generally no specific therapies indicated
 - Myocarditis/cardiomyopathy: supportive Tx; consider treating hyperinflammation
- Outcomes
 - Strong predictor of mortality
 - One group reported HR of 4.3!⁷

- 1. doi: <u>10.1161/CIRCULATIONAHA.120.047349</u>
- 2. doi: 10.1038/s41569-020-0360-5
- 3. doi: 10.1016/j.jacbts.2020.04.002
- 4. doi: 10.1161/CIRCRESAHA.120.317055
- 5. doi: 10.1001/jamacardio.2020.1017
- 6. doi: 10.1016/j.ijcard.2020.03.087
- 7. doi: 10.1001/jamacardio.2020.0950



Manage comorbidities

- Admitted patients are often *complex and heavily co-morbid*
- Don't forget about their other problems!!

Goals of Care

- Always important to discuss with all hospitalized patients
 - ESPECIALLY important to discuss with possible/confirmed COVID patients
- Mortality in elderly pts (>80 yrs) is very high (>20%)^{1,2}
- Mortality in critically ill patients is very very high
 - Upwards of 50% in several series^{3,4}
- Poor prognostic factors (see next slide)
- Excellent serious illness discussion tools: <u>https://palliativecare.med.ubc.ca/coronavirus/</u>
- 1. <u>https://www.who.int/docs/default-</u> <u>source/coronaviruse/who-china-joint-mission-on-</u> <u>covid-19-final-report.pdf</u>
- 2. doi:10.1001/jama.2020.4683
- 3. https://doi.org/10.1016/S2213-2600(20)30079-5
- 4. doi:10.1001/jama.2020.4326



Signs of deterioration

- Point in illness trajectory*
- Vitals: increasing O2 needs, tachypnea
- Clinical signs: increased WOB (look carefully!)
- Labs: rising inflammatory labs
 - D-dimer > 1000: 20x increase in mortality in one study¹
- Imaging: progressive infiltrates
- Overall picture: physiologic reserve, comorbidities, GOC
 - Age, male sex, chronic lung disease, cardiac disease, HTN, obesity, immunosuppression
- Bottom line
 - Use your clinical judgement
 - When in doubt: call for help early!!



Call for help early!!

- Always a good idea in medicine
- ESPECIALLY now
 - ICU should be happy to come see and be involved in discussions
- Refer to your hospital/health authority policy
- VCH
 - CCOT called at 4L NP
 - ICU called at 6L NP
 - **does NOT always mean the patient goes to ICU \rightarrow depends on GOC



Timing of intubation

- Strategies re: timing of intubation are evolving
 - Early pandemic: push to intubate very early (needs beyond 6L NP)
- Thinking has now *changed*
 - Scarce resources
 - Harms of invasive mechanical ventilation: ventilator-induced lung injury
- Generally accepted now that HFNC and NIMV (esp CPAP) are vey useful to prevent intubation*
 - *with appropriate precautions \rightarrow see hospital guidance
 - HFNC appears *safe*¹
 - Positive airway pressure (CPAP) especially useful



Approach to mechanical ventilation

- Another highly controversial area
- Some interesting theories with minimal data
 - L vs H phenotype¹
- ARDSnet ventilation: stick to critical care fundamentals²
 - Lung-protective ventilation, adequate PEEP
- Proning: esp if meet PROSEVA criteria³
- Overall: treat each patient individually based on their physiology
- Fortunately you will likely have a lot of smart, more senior people making these decisions ©
 - 1. doi: 10.1007/s00134-020-06033-2
 - 2. doi: 10.1056/NEJM200005043421801
 - 3. doi: 10.1056/NEJMoa1214103

Discharge planning



Timing of discharge

- Standard criteria apply
 - Off supplemental oxygen
 - Back to pre-morbid level of functioning
 - Lab tests (inflammatory markers) trending in the right direction
 - Able to cope at home
- VCH: do NOT have to have negative PCR to be discharged home
 - *exception: LTC facilities



Timing of discharge

- Discharge instructions: self-isolate for another 10d
 - Probably overly conservative
- Discharge with pending swabs
 - Public health will follow up if positive
 - Instruct to self-isolate

Post-discharge follow up

- Wards/hospitals may have protocols for this
- At minimum: f/u with Family Physician within 1 week
 - Virtually ok
- VCH: post-COVID follow-up pathway
 - Phone call from GIM within 2d of d/c
 - f/u appointment in GIM/Resp clinic
 - f/u testing incl PFTs, imaging, etc arranged



Resources



- EmCrit/IBCC: <u>https://emcrit.org/ibcc/covid19/</u>
 - Podcast: <u>http://ibccpodcast.libsyn.com/</u>
- Viruswatch: https://covidviruswatch.wordpress.com/
 - Podcast: <u>https://viruswatch.libsyn.com/</u>
- LitCovid: https://www.ncbi.nlm.nih.gov/research/coronavirus/
- COVID Evidence Alerts: <u>https://plus.mcmaster.ca/COVID-19/</u>



Dr. Naisan Garraway

1110



Surgery in the COVID-19 Pandemic

Dr Naisan Garraway

	Contraction of the second s	UNKNOWN COVID-19 STATUS	
	KNOWN COVID-19 POSITIVE	ASYMPTOMATIC ²	SYMPTOMATIC (or if symptoms cannot be assessed)
Decision	 Surgery to proceed at discretion of anesthesiologist and surgeon. Negative pressure OR if available. 	Surgery to proceed at discretion of anesthesiologist and surgeon.	Surgery to proceed at discretion of anesthesiologist and surgeon.
Testing	Not indicated	Not indicated	 Test for COVID-19 per institutional protocol but proceed with surgery.
Intubation and extubation	 Limit personnel in the OR to anesthesiologist, RN +/- AA All staff in the OR/designated procedure room don: Fit-tested N95 Respirator Face shield or goggles Gown & gloves 	 Limit personnel in the OR to anesthesiologist, RN +/- AA All staff in the OR/designated procedure room don: Fit-tested N95 Respirator Face shield or goggles Gown & gloves 	Limit personnel in the OR to anesthesiologist, RN +/- AA • All staff in the OR/designated procedure room don: • Fit-tested N95 Respirator • Face shield or goggles • Gown & gloves
Surgical Procedure	 All staff in the OR don; Fit-tested N95 Respirator Face shield or goggles Gown & gloves 	 All staff in the OR don³: Fit-tested N95 Respirator Face shield or goggles Gown & gloves 	 All staff in the OR don: Fit-tested N95 Respirator Face shield or goggles Gown & gloves
Phase 1 Recovery	 Recover in the OR suite until ready to move to designated unit Next patient can be taken to OR suite 30 minutes after preceding extubation Note: time may differ based on rate of air exchange in the OR. 	 Recover in the PAR using Droplet/Contact Precautions Next patient can be taken to OR suite 30 minutes after preceding extubation Note: time may differ based on rate of air exchange in the OR. 	 Recover in the PAR using Droplet/Contact Precautions Next patient can be taken to OR suite 30 minutes after preceding extubation Note: time may differ based on rate of air exchange in the OR.
Cleaning and Disinfection	 Cleaning staff to clean and disinfect OR suite: Fit-tested N95 Respirator Face shield or goggles Gown & gloves 	 Cleaning staff to clean and disinfect OR suite: Fit-tested N95 Respirator Face shield or goggles Gown & gloves 	 Cleaning staff to clean and disinfect OR suite: Fit-tested N95 Respirator Face shield or goggles Gown & gloves
Disposition	Return to isolation room on inpatient unit	Patient to return to appropriate inpatient unit	Return to isolation room on inpatient unit



Drs. Gillian Fyles and Ross Taylor



COVID-19 Update May 28, 2020

Ross Taylor MD, CCFP, FPA Palliative Care Consultant, Lions Gate Hospital

Gillian Fyles MD, CCFP(PC) Medical Lead Serious Illness Conversation Initiative – BC Centre for Palliative Care



What We'll Cover – mostly links to key resources!

Definition of a palliative approach to care

Identification of High - Risk Populations

Communication – ACP and Serious Illness Conversations

Symptom management of COVID-19 +ve patients

Further educational opportunities



What is a palliative approach to care?

- Palliative care aims to reduce suffering and improve QOL by addressing the physical, psychosocial and spiritual needs of persons and their family caregivers living with a *life-threatening illness*
- Palliative care is **not** the opposite of critical care

Bowtie Model Adapted for Covid-19





P. Hawley 2020 (Personal Communication)

Populations at Higher Risk for Severe Illness with COVID-19 (BC-CPC DRAFT April 2020)

- Older than 65 years of age
- Adults of any age with serious underlying medical conditions ie high blood pressure, diabetes, heart disease, chronic lung disease or moderate to severe asthma, history of strokes, chronic kidney disease, liver disease
- Immunocompromised people ie cancer, poorly controlled HIV/AIDS, transplant recipients, immune deficiencies ie prolonged use of corticosteroids and other immune-weakening medications
- Severe obesity BMI 40 or higher
- Living in a nursing home or long-term care facility
- Govt of Canada states that vulnerable populations are more at risk for contracting COVID-19 and developing severe complications due to their health, social and economic circumstances and, in addition to the above identify the following as vulnerable populations →





Vulnerability described as:

Anyone who has:

- difficulty reading, speaking, understanding or communicating
- difficulty accessing medical care or health advice
- difficulty doing preventive activities, like frequent hand washing, covering coughs and sneezes
- ongoing specialized medical care or needs specific medical supplies
- ongoing supervision needs or support for maintaining independence
- difficulty accessing transportation
- economic barriers
- *unstable employment or inflexible working conditions*
- social or geographic isolation, like in remote and isolated communities
- *insecure, inadequate, or nonexistent housing conditions*



Govt of Canada

Communication priorities – ACP and Serious Illness Conversations

- 1. Pt/Family Facing ACP Tools
 - Public tools on UBC Dept of Palliative Care and BC-CPC websites:

https://palliativecare.med.ubc.ca/coronavirus/

https://bc-cpc.ca/cpc/covid19/beprepared



2. Health Care Professional Tools

• Shared resources available through UBC Dept of Palliative Care and BC-CPC websites

https://palliativecare.med.ubc.ca/coronavirus/

https://bc-cpc.ca/cpc/all-resources/covid-19resources/#1586313525063-2d4eb83e-58c3

• Ariadne Labs COVID-19 Toolkit

https://www.ariadnelabs.org/coronavirus/clinicalresources/covid-conversations/

• BC-CPC Just in Time Education

- 75 minute videoconferenced COVID specific SIC webinar including role play.
- Contact gfyles@bc-cpc.ca if interested



Symptom Management for COVID-19 Patients

- Know your patient
- Know your resources and who to call for help ie local pall medicine specialists, local algorithms, 1-877 711-5757 line
- Invitation to a conversation about potential course and symptom management
- Consider highlighting that symptom management won't shorten life

BEFORE enacting these recomme these recommendations are consi Sug From Seattie MDs: COM Serious Illness Correr Communicating Serious News	ndations PLEASE identify patient's LEVE stent with: DNR, no ICU transfer, comfort-fe gested tools to assist with conversation: 1-19 Conversation Tips (http://bit.ly/Sectors/III astion Guide (http://bit.ly/Sectors/IIIIass/Crowersation (UpToDate, requires logn http://bit.ly/Sectors/IIIass)	L OF INTERVENTION ccused supportive care (COVID18) (nGuide) pgSeriousNews)
I below are STARTING doses. COVID-1 Consider dose ranges to give fro	9 symptoms may advance quickly. E nilline staff capacity for urgent clinical decision	le prepared to escalate do making as needed.
Patient NOT already taking opioids ("opiaid-nnive")	Patient already taking opioids	FOR ALL PATIENTS: OTHER MEDICATIONS Opicide are the mainetay of dyspnea management,
OPIOIDS (ALL relieve dysprice & can be helpful for cough - codeline is not recommended)	Continue previous opioid, consider increasing by 25% To manage breakthrough symptoms:	these can be helpful adjuvan For associated anxiety: LORAZEPAM 0.5 - 1 mg SL q2h PRN, initial orden max 3 PRN / 241
Opioide holp rolievo acute respiratory distress & agitation, contribute to energy conservation	Start opioid PRN at 10% of total dally (24h) opioid dose	MD review when max reache nunsider of 120 regular desarg For severe SOB / anxiety:
Begin at low end of range for frail elderly Start with PRN full low throshold to advance to q4h / q6th echaduled doeing: Avoid PRN = "Patient Receives Nothing"	Give PRN, q1h PRN if PO, q30min if SQ See guideline* for conversion	MIDAZOLAM 1 4 mg SCI q30mm PHN, initial order, max 3 P1N / 24
	between opioids	MD review when max reach MAY REQUIRE MUCH MOR nonsider q4b regular desing or
MORPHINE 2.5 - 5 mg PO *DR* 1 - 2 mg 3Q / IV q1h PBN (SQ / IV san be q30min PRN), if ⇒6 PRN in 24h, MD to review	For further secletance including tolephone support please contact your local Palliative Care team	For agitation / reallosances. METHOTRIMEPRAZINE 2.5 - 10 mg PO / SO g2h PP initial order: max 3 PRN / 24
HYDROMORPHONE 0.5 - 1 mg PO 'OR' 0.25 - 0.5 mg SQ / IV q1h PBN (SQ / IV can be q30min PRN), if >6 PBN in 24h. MO to review	BC Centre for Palliative Care fraserhealth	MD review when max reach consider q4n regular dosing can also be given buccally
If using >5 PRNs in 24h, consider dosing at q4h REGULARLY (consider q6h for (rail elderly) 'AND' continus a PRN dose	Respiratory secretions / col Advise family & bedside staff: col us due to patient weakness / no Consider glycopyrrolate 0/ atropine 1% (cohthadmin dron	ngestion near end-of-life ually uncontortable, just noisy, table to clear secretions ting SQ q4h PRN *OR* s) 1 - 2 drops SL q4h PBN
PLEASE TITRATE UP AS NEEDED	If 9 fulld overload consider furcsemilde Po	mg SQ q2h PBN & monthlot response
Also consider (see guidelines*): PO solution for cough eg. dextromethorphan, hydrocodone antineuseant eg. metoclopramide SQ	Engage with your team to ensure comfor end of life. Please ensure written orders i time of death will add to distress of patk These recommendations are for reference a	t is the priority as patients approa reflect this. Unmanaged symptom- ints, family members & bodside st ad do not supercede clinical judgement.
luxalive eg. PEG / sennesides	We have all employ to decrease complexity to	prise use in your population. allow barner free ase or multiple setti



Common Symptoms Seen

- Shortness of Breath and Pain opioids are the mainstay
- Agitation and Confusion haloperidol, methotrimeprazine, lorazepam/midazolam
- **Terminal agitation** consider multiple agents
- **Retained Respiratory Secretions** -reassurance +/- glycopyrrolate or scopolamine
- Followup and check in



Other Educational Opportunities

🔶 Pallium Canada

Palliative Care for COVID-19 Illness Module A: Background Information, Essential Conversations, and Ethics

Dr. José Pereira Professor and Director, Division of Parlative Care, Department of Family Medicine, Welterion, 20 - Date Scientific Officer, Parlum Canado

Dr. Amit Arya Assistant Clinical Professor, Division of Palliative Care. Department of Family Medicine, McMaster-University

> Dr. James Downar Head, Division of Pallicitive Care, Department of Medicine, University



Palliative Care for COVID-19 Illness Module B: Special Considerations and Symptom Management

Dr. José Pereire Protessor and Director, Division of Palietive Care, Department of Fernity Medic ne, fortwards the Scientific Officer, Palietim Canada

Dr. Amit Arys Assistant Clinical Protessor, Division of Palietive Care, Bepartment of Harving Lientone, Archineter Linixe ne

> Dr. James Downar Head, Division of Palliative Care, Department of Medicine, University of Clarence

Pallium.ca



Questions?

Join at slido.com #T115

This presentation and recording will be posted on Entrada for the medical students and on UBC PGME website under 'Covid Resources'