WHAT IS KETAMINE?

Ketamine is an anesthetic agent that has been in use for over 50 years. At low doses, it can reduce pain by blocking NMDA receptors, which transmit pain signals in the brain. When this receptor is blocked during a ketamine infusion, it can be "reset" or "rebooted", and the cycle of pain signaling is interrupted. Ketamine can also block other nerve pathways that play a role in opioid tolerance, hyperalgesia, inflammation, and neuropathic pain.

There is also evidence to support ketamine's efficacy for treatment resistant depression, suicidal ideation and other mood disorders that have failed other treatment modalities.

IV racemic ketamine used for either pain or mood disorders is administered at significantly lower doses than those used for anesthesia and is generally well tolerated.

WHAT TYPE OF PAIN IS IT USED FOR?

Some examples of pain that can be treated with ketamine infusions include: phantom limb pain, migraine headaches, complex regional pain syndrome (CRPS), chronic widespread pain syndrome with central sensitization, traumatic spinal cord injury, post-herpetic neuralgia, opioid-induced hyperalgesia.

WHICH MOOD DISORDERS CAN IT HELP WITH?

Some examples of mood disorders that can be treated include treatment resistant depression, bipolar disorder, obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD), alcohol use disorder. Guidelines regarding use and evidence of ketamine for mental health conditions are provided by CANMAT (Canadian Mood & Anxiety Disorders) & KATA in association with CPSBC (College of Physicians & Surgeons of BC).

POTENTIAL SIDE EFFECTS: (>95% of side effects are short-lived and resolve once the treatment is discontinued)

- Increased blood pressure and heart rate
- Dizziness
- Blurred vision
- Nausea
- Headache
- Dissociation (however, paired with psychotherapy and support is generally a welltolerated effect)
- Rare side effects may include hallucinations, dysphoria, agitation, "out of body" experience, euphoria, nightmares or bizarre dreams, sedation

CONTRAINDICATIONS

- Psychosis, unmanaged bipolar disorder or schizophrenia
- Active substance use disorder
- Uncontrolled hypertension
- Unstable angina or severe coronary artery disease
- Severe liver disease

INCLUSION AND EXCLUSION CRITERIA

INCLUSION CRITERIA

- Patient is able to provide consent to treatment
- Patient at least 18 years of age
- Patient is medically cleared by our team
- Patient has completed Bloodwork including LFTs AND 12 lead ECG within the past 6 months
- Patient experiencing one of the indications as listed by the ASA, ASRA, and AAPM/CPA/CANMAT as diagnosed by their pain physician or psychiatrist:
 - Spinal Cord Injury Neuropathic Pain
 - Complex Regional Pain Syndrome
 - o Mixed Neuropathic Pain
 - Fibromyalgia/Chronic Widespread Pain Syndrome with Central Sensitization
 - Cancer Pain
 - Treatment Resistant Headaches
 - Chronic Neuropathic Pain
 - o Treatment Resistant Major Depressive Disorder
 - o PTSD
 - Alcohol Use Disorder
 - Bipolar Disorder
 - o Phantom Limb Pain
- Evidence of treatment resistance:
 - For pain, patient has failed outcomes with higher levels of treatment: i.e., first, second, and third-line neuropathic pain pharmacologic treatment, and other focal interventions (as indicated for their specific diagnosis).
 - For mental health treatment (mood): Two failed antidepressants OR one antidepressant
 + ECT
- Patient has a physician who assumes care after a completion of ketamine treatment
- As per the KOPI protocol, patient ASA status is taken into consideration when determining appropriateness for any intervention including IV Ketamine.

EXCLUSION CRITERIA

- Patient experiencing psychotic or manic symptoms
- Patient with Substance Use Disorder of moderate severity and above
- Patient who is unable to adhere to treatment/recovery protocol (e.g., attend scheduled appointments, arrange for safe transportation after the treatment)
- Allergic reaction or other contraindications to ketamine
- Patient with symptomatic acquired brain injury
- Uncontrolled medical disorders (e.g., hypertension, severe liver dysfunction)
- Pregnancy

REFERRING PHYSICIAN CRITERIA AGREEMENT

*The following questions must be checked off in agreement by the referring physician.

I confirm – That the patient meets all the above inclusion criteria.	
I confirm – I will remain the patient's ongoing primary care physician OR psychiatrist and that this referral is only to supplement Ketamine infusions at KOPI.	
I confirm – I will review all notes and recommendations by KOPI.	
I confirm – I understand KOPI and Dr. Pikard will not provide ongoing psychiatric care.	
I confirm – I am responsible for notifying KOPI if the patient develops new medical conditions or begins new treatments including medications while the patient is receiving treatment at KOPI.	
I confirm – I have included all requested chart notes, imaging, discharge summaries, recent Bloodwork (LFT), and recent ECG report.	
I confirm – If KOPI physicians request Bloodwork and/or ECG, and the referral is declined as a result of abnormal ranges, KOPI will refer patient back to referring physician for follow up.	

REFERRAL INFORMATION

Failure to complete any part of the referral information portion will result in a denial for accepting a referral and will be sent back to the referring physician.

PATIENT NAME: LAST:FIRST:FIRST:FIRST: DATE OF BIRTH (MM/DD/YYYY): OHIP NUMBER: HOME ADDRESS:	GENDER:
OHIP NUMBER:	
	VERSION CODE:
CITY:E-MAIL:	
HOME NUMBER:	
CELL PHONE NUMBER:	
REFERRING PHYSICIAN CONTACT INFORMATION	
NAME:	
OHIP#:	
CLINIC:	
PHONE#	
FAX#:	
E-MAIL:	
ADDITTIONAL INFORMATION	
Does your patient plan on using WSIB or VAC for coverag (Y/N).	ge of their ketamine infusions at KOPI?
WHAT IS YOUR PATIENT'S PRIMARY DIAGNOSES? (Please choose one of the two options

WHAT IS YOUR PATIENT'S SECONDARY DIAGNOSES? (SELECT ALL THAT APPLY)

KETAMINE FOR MOOD/PSYCHIATRIC &CHRONIC PAIN INDICATION			
☐ TREATMENT RESISTANT DEPRESSIVE DISORDER			
□ PTSD			
☐ ALCOHOL USE DISORDER			
☐ BIPOLAR DISORDER			
☐ PHANTOM LIMB PAIN			
☐ TREATMENT RESISTANT HEADACHES			
☐ CRPS			
☐ CHRONIC WIDESPREAD PAIN WITH CENTRAL SENSITIZATION			
☐ TRAUMATIC/ATRAUMATIC SPINAL CORD INJURY			
☐ POST HERPETIC NEURALGIA			
☐ OPIOID INDUCED HYPERALGERSIA			
☐ CENTRAL NEUROPATHIC PAIN			
PERIPHERAL NEUROPATHIC PAIN			
□ OTHER:			
PLEASE DESCRIBE PATIENT PRESENTING SYMPTOMS:			
LIST COMORBID PSYCHIATRIC CONDITIONS:			

LIST CURRENT MEDICAL CONDITIONS:	
DOES YOUR PATIENT HAVE ANY ALLERGIES? Yes:No:	
HAS YOUR PATIENT EVER RECEIVED KETAMINE TREATMENT BEFORE? Yes:N	lo:
**IF YES PLEASE INCLUDE PREVIOUS CLINIC RECORDS WITH REFERRAL.	

PLEASE ATTACH MOST RECENT RELEVANT CONSULTATIONS AND/OR HOSPITAL DISCHARGE SUMMARY TO SUPPORT YOUR PATIENT'S REFERRAL.

MEDICATIONS AND CURRENT/PAST TREATMENT INTERVENTIONS

Please confirm which 2 trials of antidepressant/pain medications the patient has failed.		NO
NMDA – Receptor Antagonists (Ketamine or Esketamine/Spravato)		
Antidepressants		
Antipsychotics		
Benzodiazepines		
Mood Stabilizers		
Opioids		
Gabapentinoids		
Cannabinoids		
Muscle Relaxants		
NSAIDS		
	YES	NO
Has your patient ever received Transcranial Magnetic Stimulation? (rTMS)		
Has your patient ever received Electroconvulsive Therapy (ECT)		
LIST ONGOING PSYCHOTHERAPY/COUNSELLING:		

PLEASE SELECT PREVIOUSLY TREATMENTS TRIALED FOR CHRONIC PAIN MANAGEMENT OR MENTAL HEALTH CONDITIONS

	YES	NO
Lidocaine Infusion -		
(If YES, Highest Dose Trialed?)		
Landmark Based Injections		
Ultrasound Guided Injections		

If the patient has not trialed these options, they may be referred to the Chronic Pain Clinic for full assessment, however, you can still submit this referral for Ketamine consideration.

Please include any prior records or discharge summaries.

**PLEASE INCLUDE A LIST OF CURRENT MEDICATIONS WITH DOSAGES:

*We also request that you please have your patient fax us a 2-year Rx history from their pharmacy.

Additional Information

Please be advised there is no ODSP or OHIP coverage for this service.

We provide information for Third Party Insurance coverage needs, but coverage is not always guaranteed.

Referring Physician (Please Print)	
Referring Physician (Signature)	
Date:	

Thank you for your referral.

In accordance with the OMA guidelines, our estimated waitlist for your patient is approximately 2-3 months from time of referral. The patient will be required to fill out our Intake questionnaires and provide a two-year prescription history from their pharmacy. The Intake Questionnaire will be sent to patients after an initial call with our Coordinator, information regarding our Ketamine clinic can be found on our website at www.kopi.ca. These referrals can be faxed to us at 613-344-1203.