OPIATE ADDICTION
PATHOPHYSIOLOGY AND
HERBAL INTERVENTIONS

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FINANCIAL DISCLOSURE: CONSULTANT TO RESTORATIVE FORMULATIONS
CHASING THE DRAGON

- The are at least 4 million opiate addicts in the US alone.

- At least 1.5 Million people undergo treatment for heroine addiction in the US each year.

- Opiate addiction is a leading cause of homelessness and a myriad of other social issues.

- Opiate addiction may be a hidden agenda in Afghanistan.

- “Heroin is a multibillion dollar business supported by powerful interests, which requires a steady and secure commodity flow. One of the “hidden” objectives of the war [in Afghanistan] was precisely to restore the CIA sponsored drug trade to its historical levels and exert direct control over the drug routes.”

Global Research, Center for Research on Globalization
The Spoils of War: Afghanistan’s Multibillion Dollar Heroin Trade
Hidden Agenda: Restore the Drug Trade
Prof Michel Chossudovsky
OPIATE ADDICTION

- **Chasing the dragon**, is the phenomenon where escalating quantities of drug are necessary to achieve the same level of satisfaction.

- There are around 30,000-40,000 opiate associated deaths per year in the US.

- Treatment for heroine and opiate addiction has the worst success rate – just 2-5% - of all addictive disorders.
AN OPIATE EPIDEMIC IN THE US

- CDC reports that opiate sales, hospital admissions, and opiate overdose deaths have tripled in the last 30 years and now exceed motor vehicle deaths per year.

- New York City health statistics reported 21,600 incidents of inpatient and emergency room admissions for opiate related issues all years prior to 2006, and over 126,000 in a 6 year period after 2006.

- Some communities report waiting lists for admission to methadone maintenance treatment programs.

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J Addict Med. 2013 May-Jun;7(3):177-82. Opiate-dependent patients on a waiting list for methadone maintenance treatment are at high risk for mortality until treatment entry. Peles E, Schreiber S, Adelson M.
Byzantine alchemists produced opium-based medicinal syrups and poppy seeds have been unearthed in ancient burial sites.

Opium has been a pain remedy for thousands of years.

Ancient opiate remedies include Mithridate and Theriac Andromache, also known as Venice Treacle.

Opium is mentioned in the Eber’s Papyrus and the writings of Dioscorides, Galen, and Avicenna.
A BRIEF HISTORY OF OPIATES

- Opium was once thought of as a panacea for emotional disorders, sleep problems, snake bites, and pain.
- Opium has been referred to as *lachryma papaveris* or poppy tears.
- In India, opium was traditionally harvested by licensed farmers.
- In the 1700s, the East India Company was greatly involved in the opium trade through India, and later, in laudanum distribution.
A BRIEF HISTORY OF OPIATES

- The recreational use of opium began in Asia began in the 1400s.

- Opium smoking began as a privilege of the elite and remained a great luxury into the early 19th century.

- As the opium trade became established over the next several hundred years, opium use became more common and opium “dens” emerged throughout China.

- Users would often smoke opium laying on their sides, to prevent choking on their own saliva due to respiratory suppression when laying on the back.
FROM OPIUM TO MORPHINE TO HEROIN

The English physician Thomas Sydenham developed an opiate tincture called laudanum, in 1683.

Laudanum became the leading pain pharmaceutical for several hundred years.

Paracelsus, however, used the term “laudanum” 150 years prior for his own opiate-based pain remedy, and chose the name from the Latin verb “laudare”, meaning to praise.
A BRIEF HISTORY OF OPIATES

- Both *Papaver orientale* and *bracteatum* have been bred for greater thebaine content and are in great demand by the pharmaceutical and drug industry alike.

- Raw opium is refined into morphine or heroin close to the grow fields as it is less bulky and easier to smuggle.

- Black tar heroin is produced especially in Mexico and is common in the western states of the US.
A BRIEF HISTORY OF OPIATES

- By the 1700s the use of opium was so widespread and problematic that China outlawed the practice, but with little effect.

- A Chinese emperor attempted to confiscate opium stores in what became known as the Opium Wars in 1839 and 1858.

- Chinese immigrants brought opium smoking to San Francisco and the US government quickly attempted to control consumption.

- US president Harrison was treated with opium in 1841 and the Union Army used 2.8 million ounces of opium tincture and powder, and about 500,000 opium pills to treat soldiers in the Civil War.
FROM OPIUM TO MORPHINE TO HEROIN

Upon its initial discovery, morphine was thought helpful for opium addiction and alcoholism but was quickly realized to be more addictive than either opium or alcohol.

Morphine was used widely during the American Civil War and resulted in some 400,000 soldiers with morphine addiction. Thomas de Quincey published *Confessions of an English Opium-Eater* in 1821, inciting a national debate on opiate drugs.
PAIN AND ADDICTION
The Sweet Sister of Sleep

- Opiates ease pain and bring on blissful sleep.
- Some users find their way to heroin following a long relationship with prescription opiates.
- Pain is exacerbated upon withdrawal from opiates and chronic opiates use causes physical pain to escalate overtime.

Morphine was one of the first plant alkaloids to be isolated and purified in 1804 by Friedrich Sertürner. Sertürner distributed morphine as an analgesic himself for a decade until it was commercially available from a small independent apothecary that has since grown into the pharmaceutical giant Merck.

The sale of Morphine became even more popular after the development of the hypodermic needle in 1857. Heroin was first synthesized from Morphine in 1874 and bought to market by Bayer in 1898. It became possible to synthesize morphine from petrochemicals in the 1950s.
The opioid system helps regulate pain, temperature, mood, and hormones.

The opioid system plays a role in complex social behaviors including the formation of committed emotional and reproductive pair relationships and attachment in bonding between and mother and child/offspring.

The opioid system plays a role in the “reward pathway”.

Opiate drugs bind opiate receptors and activate the “reward” sensation, and unfortunately, can act as a higher priority reward than the emotional bonding opiate pathways have evolved to encourage.

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Hum Brain Mapp. 2015 Sep;36(9):3621-8. Adult attachment style is associated with cerebral μ-opioid receptor availability in humans.
TYPES OF OPIATES

- ENDOGENOUS OPIATES
- PRESCRIPTION OPIATES
- NATURALLY OCCURRING PLANT OPIATES
- COMMONLY ABUSED OPIATES
- OPIOID ANTAGONISTS
- THE OPIOID MAINTENANCE THERAPY (OMT) DRUGS
THE ENDOGENOUS OPIATES

- **Enkephalins** – mediate reward pathway
- **Dynorphins** – mediate general mood, tone, and emotional affect.
- **Endorphin** – help temper the discomfort of stress and trauma, both mental and physical.
- **Nociceptin** – helps mediate pain
- **Morphine** – occurs endogenously but its role as yet unclear.
THE PRESCRIPTION OPIATES

- **Paregoric** – an early opiate derived drug used to treat diarrhea
- **Laudanum** – an early alcohol macerated tincture of opium used to treat pain and induce sleep.
- **Vicodan** – Commonly prescribed analgesic
- **Hydrocodone** - Analgesic
- **Oxycontin/Oxycodeone** - Analgesic
- **Hydromorphone** (Dilaudid, Hydal)
- **Oxymorphone** (Numorphan, Opana)
- **Codeine and Dextromethorphan** - Antitussives
- **Loperamide** - Anti-diarrheals
- **Fentanyl**
- **Pethidine/meperidine**
- **Morphine** – usually used in hospital settings for extreme pain.
- **The Morphinan** family of agonist-antagonist drugs (levorphanol, dextromethorphan and others)
- **Trivalin** - a European drug combining morphine and a Valerian derivative used for sleep.
- **Tetravalin** – A compound combining codeine and valerates.
THE NATURALLY OCCURRING PLANT OPIATES

- Opium
- Codeine
- Morphine
- Thebaine
- Papaverine
THE COMMONLY ABUSED OPIATES

- Opium
- Hydrocodone (Oxycodone)
- Heroin - is classified as a short acting opiate.
- Desomorphine (Krokodril) Russian semi-synthetic opiate, 8 times more potent than morphine and associated with horrifying decay of tissue called “Krokodril Korrosion”.
- Hydromorphpinol

“Krokodril Korrosion” from gallopingbeaver.blogspot
OPIOID ANTAGONISTS INCLUDE:

- **Naloxone (Narcan)** - typically used parenterally in research.

- **Naltrexone (Vivitrol, Trexan)** - administered as a long acting injection

- **Naltrexonediprenorphine (M5050, the reversing agent for the Immobilon dart)**

- **Nalorphine (Nalline)**
THE OPIOID MAINTENANCE THERAPY (OMT) DRUGS

- **Methadone** – long acting opiate agonist
- **I-alpha-acetylmethadol (LAAM)** – long acting opiate agonist
- **Buprenorphine (Subutex)** – long acting opiate agonist
- **Buprenorphine-Naloxone (Suboxone)** - Partial agonist and partial antagonist.
OPIATE RECEPTORS, ANANDAMIDE
There are several subtypes of MORs:

- **μ1**: involved in analgesia and physical dependence.
- **μ2**: can depress respiration and GI motility, can promote euphoria and is associated with physical dependence.
- **μ3**: May help control vasodilation.
ENDOGENOUS OPIATE AGONISTS
ANANDAMIDE

- **ANANDAMIDE** is a neurotransmitter involved in the regulation of stress responses and pain.
- Anandamide was so-named after the Sanskrit word for bliss, *Ananda*.
- Anandamide binds to cannabinoid receptors in the brain.
- Animals experience greater stress symptoms when Anandamide is blocked.
Anandamide may also bind to Transient Receptor Potential (TRP) Vanilloid receptors and researchers believe that this also may mitigate conditioned fear responses.

Anandamide may help mitigate and lasting effects from negative events to help prevent them from becoming emotionally crippling.

Behav Brain Res. 2013 Nov 1;256:101-7. Effects of endocannabinoid and endovanilloid systems on aversive memory extinction. Laricchiuta D, Centonze D, Petrosini L.
OPIATE SIDE EFFECTS, TOLERANCE, AND WITHDRAWAL SYMPTOMS
<table>
<thead>
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OPIATE TOLERANCE

The euphoria-promoting effects of heroin and other opiates wear off fairly quickly necessitating higher and higher doses to yield results – a phenomena referred to as tolerance.

TOLERANCE OCCURS DUE TO SEVERAL MECHANISMS INVOLVING:

- Changes in the number of opioid receptors, the phosphorylation responses of the receptors,
- Up-regulation of cyclic AMP pathways, and
- Molecular changes involving the G proteins and
- Molecular changes involving beta-arrestins to which the opiate receptors are coupled.

cAMP up-regulates as a counter-regulatory mechanisms to oppose the sedating effects of opiates.
AGENTS THAT SLOW OR PREVENT OPIATE TOLERANCE

- **Olea** - Olive leaves contain oleuropein shown to prevent tolerance to morphine by preventing the up-regulation of calcium channels.

- **Zingiber** may potentiate morphine’s analgesic effect via calcium channel blockade and many other mechanisms.
The cessation of heroin causes marked physical withdrawal symptoms:

- 6-14 hrs: Anxiety, irritability, dysphoria, drug craving, and possibly perspiration
- 14 to 18 hours from last dose: Yawning, heavy perspiration, lacrimation and runny nose, and trance-like state where sleep is desired but rarely achieved.
- 1 to 1½ days from the last dose: Headaches, nausea, vomiting, diarrhea, and intestinal cramps that may worsen and persist for a full 24 to 72 hours.
- Hot and cold flashes, with goose bumps and shivering is where the term “cold turkey” comes from and are typical with opiate withdrawal.
- The pupils become dilated, the pulse is elevated, and restlessness occurs, often with spastic and restless legs, where the term “kicking the habit” is derived.
SYMPTOMS OF OPIATE WITHDRAWAL

- Increased pulse rate
- Dilated pupils
- Bone and Joint pain
- Runny nose and tearing
- Tremors, shaky hands
- Yawning, several times per minute at times
- Anxiety and Irritability
- Goosebumps
- Intestinal cramps and diarrhea
- Perspiration
NALOXONE FOR HEROIN OVERDOSE

Naloxone, an opiate blocking drug, is the drug most commonly given for acute heroin and prescription opiate overdose and can be lifesaving.

Naloxone is used for acute overdose symptoms, but will, of course, also initiate acute and severe opiate withdrawal symptoms.

BOTANICAL OPTIONS FOR HEROIN ADDICTION, WITHDRAWAL, AND MAINTENANCE
PLANTS THAT BIND OPIATE RECEPTORS

- Actaea racemosa – Black Cohosh
- Corydalis species – A poppy family genus
- Eschscholzia californica – The California Poppy
- Maytenus rigida – Chuchuwasa
- Mitrigyna speciosa – Kratom
- Papaver somniferum - Poppies
- Salvia divinorum – Magic Mint
- Trifolium pratense – Red Clover
CBD MAY TREAT PAIN AND MINIMIZE THE SYMPTOMS OF ACUTE OPIATE WITHDRAWAL
Cannabis sativa

- Endocannabinoid receptors are bound by cannabinoids such as THC.

- Cannabinoids such as THC and anandamide promote the release of endogenous opioids.

- Endocannabinoid receptors interact with opioid receptors and are found within close proximity to one another and the two systems may share G proteins in common and both interact with dopamine.


**Life Sci.** 2009 Aug 26;85(9-10):351-6. Opioid receptor and NO/cGMP pathway as a mechanism of peripheral antinociceptive action of the cannabinoid receptor agonist anandamide. Reis GM, Pacheco D, Perez AC, Klein A, Ramos MA, Duarte ID.

**Int Rev Psychiatry.** 2009 Apr;21(2):143-51. Interaction of the cannabinoid and opioid systems in the modulation of nociception. Welch SP.
Cannabis sativa

- Cannabinoids evoke the release of endogenous opioids and promote mild analgesia via mu-opiate agonism.
- Some researchers report an “anti-nociceptive synergy” between cannabinoids and opioids.

Cannabinoids include:

- N-acyl ethanolamines, such as N-arachidonoylethanolamide (anandamide), oleoylethanolamide and palmitoylethanolamide,
- monoacylglycerols, such as 2-arachidonoyl glycerol.
Cannabis sativa

- The endocannabinoid system modulates cognitive processes, including memory formation, retrieval and extinction, but the details remain unknown.

- Cannabinoids are involved in nociceptive processing and the many uses of medical marijuana include chronic pain, nausea, and possibly opiate withdrawal.

- Cannabinoids may serve as an “emotional buffer”, moderating our experiences as they are put through cognitive processes.

Corydalis species: C. yanhusu, C. bungeana, Corydalis humosa

- Corydalis is a genus in the Poppy family long used as sedatives and analgesics.
- Corydalis contains many isoquinoline alkaloids such as tetrahydropalmatine, corydaline, protopine, berberine, palmatine, jatrorrhizine, coptisine, and dehydrocorydaline, that may affect limbic and reward pathways.
- Corydalis cava may promote adrenaline breakdown and metabolism, as well as the synthesis of melanin from DOPA.

References:


Corydalis and Stephania
Alkaloid Tetrahydropalmatine

- The alkaloid tetrahydropalmatine occurs in both Corydalis and Stephania species and both plants are helpful for opiate addictions.

- Tetrahydropalmatine has been produced into a prescription drug in China marketed under the name Rotundine.

- Tetrahydropalmatine is a dopamine 1 and 2 antagonist and a D3 agonist.

- Tetrahydropalmatine also acts as a agonist at adrenergic and serotonin receptors, and possibly GABA.

Stephania intermedia

- Stephania is a traditional Chinese herb.

- The alkaloid L-Stephanolidine is both a dopamine D1 receptor agonist and a D2 antagonist.

- Animal studies suggest Stephania may be helpful for opiate addiction reducing heroine seeking behavior in primed animals.

- This also suggests the herb may help prevent relapse in heroin addicts attempting to recover.

Neurosci Lett. 2013 Nov 20. L-Stepholidine, a natural dopamine receptor D1 agonist and D2 antagonist, inhibits heroin-induced reinstatement. Ma B.

Neuroreport. 2014 Jan 8;25(1):7-11. L-Stepholidine, a naturally occurring dopamine D1 receptor agonist and D2 receptor antagonist, attenuates heroin self-administration and cue-induced reinstatement in rats. Yue K.
L-tetrahydropalmatine

- Reduces heroin consumption in animal models of addiction.
- Prevents heroin-driven changes in the NA and VA.
- Diminishes reward pathway activation of the reward pathway activation, suggesting balancing effects on the limbic system.
- Protects the limbic system from stress-induced changes in gene expression.


Zhongguo Zhong Yao Za Zhi. 2012 Nov;37(22):3457-61. Study on acting mechanism of anti-morphine conditioned place preference between aqueous extract of Corydalis yanhusuo and L-THP and comparison of their effects. Luo SY.


OTHER PROTOBERBERINE ALKALOIDS

- **L-isocorypalmine** is a partial agonist at D1 and antagonist at D2 receptors, shown to mitigate cocaine withdrawal symptoms.

- **Acetylchorynoline** prevent dopaminergic degeneration in Parkinson’s disease models.

- **Tetrahydroberberine** may help correct opiate-induced digestive suppression by upregulating GI motility via D2 serotonergic receptor agonism.
Eschscholtzia californica

- Eschscholtzia poppies contain small amounts of natural opiates.

- Eschscholtzia is a gentle nervine and may ease opiate withdrawal symptoms, and possibly reduce the cravings for opiate when used long-term.

- Eschscholtzia may inhibit catecholamine breakdown by MAO.

- Eschscholtzia inhibits adrenaline production and affects HPA tone.

Eschscholtzia californica
Devil's Claw reduces arthritic pain and need for pain medications.

The plant has anti-inflammatory effects orally and topically.

Harpagophytum may be pain relieving via opiate pathways.

Harpagophytum may help wean from opiate pain meds and other opiates.

Warnock M,

Abdelouahab N,

Uchida S,
St. Johnswort has broad neurotransmitter effects on serotonin, GABA, and dopamine.

*Hypericum* may ease the symptoms of acute morphine withdrawal.


**Phytother Res.** 2009 Apr;23(4):564-71. Adulterant profile of illicit street heroin and reduction of its precipitated physical dependence withdrawal syndrome by extracts of *St John’s wort* (*Hypericum perforatum*). Subhan F, Khan N, Sewell RD.

Hypericum was shown to be as effective as clonidine for the symptoms of opiate withdrawal in animal models of addiction.

Hypericum perforatum can reduce abdominal spasm and diarrhea in animal models of acute opiate withdrawal.
JITAI TABLETS and JINNUUI CAPSULES

- Jitai tablets are a TCM herbal-marine combo with a dozen ingredients traditionally used for acute opiate withdrawal symptoms.

- Jitai tablets contain amygdalin, danshensu, Datura alkaloids, ferulic acid, hydroxysafflor yellow A, and salvianolic acids.

- The effects of Jitai tablets are similar to those of clonidine in controlling the withdrawal symptoms of morphine-dependent animals.

- Human Clinical studies further confirm Jitai tablets to be effective in controlling both acute and protracted opiate withdrawal symptoms.

[Journal of Chromatography B Volume 912, 1 January 2013, Pages 75–84] Simultaneous determination of six hydrophilic components in rat plasma after oral administration of Jitai tablet by liquid chromatography–electrospray ionization–tandem mass spectrometry: Application to a pharmacokinetic study  Shu-Ping Wanga et al.
JITAI TABLETS and JINNUI CAPSULES

- Jitai tablets were found to be as effective as lofexidine for acute heroin withdrawal in one clinical trial.

- No significant adverse effects have been found on the liver and kidney function in patients.


Magnolia

Methyhonokiol may bind cannabinoid receptors and contribute to its anti-inflammatory effects on neural tissue.

Mitragyna speciosa

- Kratom/Khratom, Ketum is an Asian plant use by villagers in Thailand and Malaysia.

- *Mitragyna* leaves contain mitragynine and related alkaloids having both opiate and cocaine-like effects and was banned in Malaysia in 2004.

- *Mitragyna* tea is reported to be relaxing and enjoyable, and to increase stamina and physical endurance, provide pain relief and improve sexual performance.

- Many users reported difficulty in abstaining from consuming the tea so frequently.

Mitragyna speciosa

- Heroin addicts in Thailand and Malaysia report *Mitragyna* has helped them wean off heroin.

- Animal studies suggest *Mitragyna* induces cytochrome enzymes in the liver promoting drug metabolism.


**Drug Metabol Drug Interact.** 2013;28(2):95-105. *Mitragyna speciosa Korth leaves extracts induced the CYP450 catalyzed aminopyrine-N-demethylase (APND) and UDP-glucuronosyl transferase (UGT) activities in male Sprague-Dawley rat livers.* Azizi J, Ismail S, Mansor SM
Mitragyna speciosa
Nigella sativa
BLACK SEED, BLACK CUMIN SEED OIL

- *Nigella sativa* has been shown to ease opiate withdrawal symptoms without being an opiate itself.
- Ayurvedic clinicians report empirically that *Nigella* also reduces the infections and weaknesses to which most addicts suffer.

Anisodamine

- Anisodamine is a naturally occurring atropine derivative studied in China for Opiate addiction.

- Like atropine and scopolamine, anisodamine is a cholinergic antagonist and alpha adrenergic blocking agent.

- Anisodamine has a weak vasodilating activity as well as anti-anxiety activity helpful in acute withdrawal, or possibly to use in small amounts for long term maintenance.

Scopalamine and SDT

- Scopalamine is a tropane alkaloid found in *Atropa belladonna*, *Hyoscyamus*, and *Datura*.

- Isolated scopolamine has been used for decades as a topical patch to prevent acute motion sickness in susceptible individuals.

- Recent research suggests scopolamine detoxification technique (SDT) may be an alternative for acute heroin withdrawal symptoms.
Scopalamine and SDT

- Human trials suggest that IV scopolamine with chlorpromazine may reduce heroin craving, depression, and anxiety compared with the methadone group.

Withania somnifera

- Ashwagandha mitigates morphine’s effects on the CNS and is thereby therapeutic for opiate addiction.

- Withania has effects on GABA receptors and MORs.

- Withania has protective and regenerative effects on neurons.

**Withania somnifera**

- *Withania* reduces heroin withdrawal symptoms if given chronically prior to withdrawal, but not to ease the symptoms when given upon initial abstinence in animal models of heroin addiction.

- Long term ingestion of *Withania* has been shown to fully prevent the loss of dopaminergic density in the NA upon opiate withdrawal.

SAMPLE CLINICAL THERAPY FOR ACUTE WITHDRAWAL
PRIOR TO WITHDRAWAL - PREPARATION

- Secure an educated, compassionate support person
- Gather all Supplies and Medicine (Right)
- Prepare a room with rags, towels, a bucket or large bowel to vomit in, and preferably near a bathroom, spare sheets.
- Prepare the bathroom with a large bucket for emesis, extra toilet paper, Epson salts and candles for the bath.
- Begin taking Withania, several weeks ahead of time where feasible.
- Consider music, books on tape, recorded nature sounds as person prefers.

MEDICINES TO HAVE ON HAND:

- Herbal Tincture (Following Slide)
- Herbal Tea both iced and hot (Recipe Following)
- Scopalamine patches?
- Massage Oil, Tiger Balm
- Heating pad or Heat Pack.
- Essential Oils for Topical and Inhalant Use
- GABA 500 mg pills
- Calcium/Magnesium liquid or powder to use in water or herbal tea.
FORMULAS TO EASE ACUTE WITHDRAWAL SYMPTOMS

**Example Tincture**
- Hypericum 15 ml
- *Piper methysticum* 15 ml
- Corydalis 15 ml
- Eschscholtzia 15 ml
- Atropa belladonna 4 ml

**Other Tincture Options**
- Actae racemosa
- Withania
- Salvia miltiorrhiza
- Datura stramonium
- Stephania

**SIG:** 1 dropper (1/2 tsp) every 15 minutes, reducing as symptoms ease over 24 hours.
TEA TO EASE
ACUTE WITHDRAWAL SYMPTOMS

**Tea Formula for Opiate Withdrawal**

- *Matricaria chamomilla*
- *Melissa citronelle*
- *Hypericum perforatum*
- *Mahonia* (shredded root bark)
- *Mentha piperita*
- *Eschscholtzia californica*

Combine equal parts of the dry herbs and prepare 6 or more cups by steeping 1 TBL per cup of hot water. Steep and strain.

- Prepare ahead of time and have several cups hot, in a thermos.
- Fill one ice cube tray with the tea and freeze. When frozen, place the ice cubes in a zip lock back, cover with a thick towel and pound into slivers. Return to the freezer until ready for use.
- Place remainder of the tea in a large jar and chill.
- Allow the patient to choose hot or cold tea. Offer ice chips by the spoonful when severe N & V are leading to dehydration.
ESSENTIAL OILS FOR ACUTE WITHDRAWAL

Mint Oil

- Simply smelling mint oil can help with nausea and reduce vomiting.
- Rubbing mint oil into the abdomen and covering with heat can reduce intestinal cramping, bloating, pain and diarrhea.

Citrus Oils

- Orange, Lemon, Tangerine, Mandarin, and Grapefruit essential oils has a room uplifting effect.
- Spray in the room or combine with Mint essential oil for a person to simply inhale through out the withdrawal process.
LONG TERM CONSIDERATIONS

- Adrenal Herbs
- Treat Underlying Pain
- Treat Underlying Anxiety and Depression
- Devise a diet plan with regular meals and snacks
- Avoid Hypoglycemia
- Ample Protein
- Nutritional Supplements

- Consider a Change in Environment, Friends, Visual Cues
- New Music, New Art, New Routines
- Meditation, Mindfulness, Therapy Groups, Recovery Support
- Exercise, Hiking, Yoga,
- Nature Therapy
- Focus on Interpersonal Relationships
- Pets, Plants, Gardening,
- Ritual and Ceremony
- Consider liver support, brain nutrients, detox protocols
- Consider in Patient, Year Long Treatment programs
RESOURCE GUIDES FOR PARENTS, PATIENTS, AND SIGNIFICANT OTHERS

Put together a resource guide to services available in your community.

- Mental Health Crisis Lines
- Nearest ER for Overdose
- Addiction Specialists
- Needle Exchange
- Methadone and OMT Centers
- Clinicians offering Vivitrol
- In Patient Facility
- Out Patient Recovery Group
- Counselors and Mental Health Services
- Social Service Organizations for Food Stamps, Job Support, Skill Centers

I have this information typed up into a large booklet for patients, family members, physicians, and other clinicians,

For Educational and Team Building Purposes
And For patients themselves

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THANK YOU!!