Ketamine Assisted Psychotherapy

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Neither us nor our spouses/partners have a relevant financial relationship with a commercial interest to disclose.
Overview

- Ketamine assisted psychotherapy (KAP)
  - Literature on KAP
- KAP clinic at Massachusetts General Hospital (MGH)
  - KAP research at MGH
Background

• Ketamine is the only legal psychedelic substance
• Mostly IV ketamine use has been used for treatment resistant depression (TRD) in academic medical centers generally without the therapeutic component
• Psychotherapy is considered a key element in the treatment of depression with other psychedelic drugs (e.g., MDMA and psilocybin) in other trials
What is Ketamine Assisted Psychotherapy (KAP)?

- Therapeutic aspects key element of treatment; the psychedelic substance is the catalyzer of the therapy experience, allows access to unconscious material
- Approaches are mainly Jungian psychoanalysis and transpersonal psychology
- Non-directive, target subjective experiences
- Purpose to integrate their subjective psychedelic experience into their lives
What is Ketamine Assisted Psychotherapy (KAP)?

• “Set and setting” are deemed essential for an optimal outcome:
  – ”Set” – the therapist assists the patient to enter the experience with an appropriate mindset, intentions, and questions
  – “Setting” - the therapist assists the patient to create a safe/supportive experience (physical and social environment)

• No studies of psychedelic assisted psychotherapy or KAP applied to ketamine use for TRD.
Ketamine Assisted Psychotherapy (KAP): Patient Demographics, Clinical Data and Outcomes in Three Large Practices Administering Ketamine with Psychotherapy

Jennifer Dore\textsuperscript{a}, Brent Turnipseed\textsuperscript{b}, Shannon Dwyer\textsuperscript{a}, Andrea Turnipseed\textsuperscript{b}, Julane Andries\textsuperscript{c}, German Ascani\textsuperscript{c}, Celeste Monnette\textsuperscript{c}, Angela Huidekoper\textsuperscript{d}, Nicole Strauss\textsuperscript{d}, and Phil Wolfson\textsuperscript{c,d}

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\textbf{Patient population:}
- 235 patients across three outpatient practices (Northern CA & Austin TX)
- Diagnoses (in order of frequency): MDD, developmental trauma, ADHD, PTSD, GAD, other anxiety d/o, other mood d/o, SUD, OCD
- Mean age 42.7 years; 48.9\% women; 85.5\% college or graduate degree
- Average of 2.84 psychiatric medications; Past psychotherapy average 3-5 years
- 65\% naïve to psychedelics
- Moderate depression (BDI mean = 26.55); moderate anxiety (HAM-A mean 20.35); significant adverse childhood experiences (ACE score mean = 3.63)
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**Therapeutic Intervention:**

- Up to 3 hour sessions with supervised recovery
- Set and setting were considered – “a nest in the Winnicott sense, a place of safety and security…”
- Trust is central, vulnerable state
- Long sessions create a therapeutic environment that was more “human, intimate”
- 2 therapists to reduce “…concern for intrusion or violation”
Dosing and frequency of sessions:

- **Start with sublingual (SL) dosing and “may then move to IM” (61.5% received IM)**
- **Dose ranges “titrated in office and then adjusted at home to achieve and maintain access to the trance state...” Average dose: 200–250 mg SL, 80–90 mg IM.**
- **Sessions were “...generally held in the office usually two weeks apart, or more frequently depending on acuity.” Number of in office KAP sessions 1-25 sessions.**
- **“Different diagnoses have different frequencies for KAP and all of our practices are individualized.”**
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**KAP Significantly Decreases Depression and Anxiety**

**Clinically significant decrease in both HAM-A and BDI after treatment \( p<0.0001 \)**

![Graph showing decrease in BDI and HAM-A scores with treatment](image-url)
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**Results:**

- Greater frequency of sessions correlated with greater antidepressant effects
- Patients with more severe symptoms (i.e., higher BDI, suicidality intake and within past year, history of psych hospitalization, and higher ACE scores) had greater improvements (i.e., depression, anxiety, well being, PTSD, SUD)
- Increased age associated with greater improvement in depression and anxiety
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Conclusions:

• Significant benefits for a variety of diagnoses with moderate anxiety and depression and significant level of childhood adverse events
• Comparing this study to IV clinics is not available
• “...we have not had patients seek ketamine outside of our clinical practices or encountered any other indication of addictive behavior.”
• May not be for everyone:
  – some had side effects - (< 5%) cannot tolerate the nausea and vomiting experienced even with preventative medication
  – rigid personality structures (OCD, personality disorders) – find the trance state “difficult”
Cognitive behavior therapy may sustain antidepressant effects of intravenous ketamine in treatment-resistant depression

Samuel T. Wilkinson, MD\textsuperscript{1,2}, DaShaun Wright, BS\textsuperscript{1}, Madonna K. Fasula, APRN\textsuperscript{1,2}, Lisa Fenton, PsyD\textsuperscript{3}, Matthew Griep, MD\textsuperscript{1,2}, Robert B. Ostroff, MD\textsuperscript{1}, and Gerard Sanacora, MD, PhD\textsuperscript{1,2}

- Small ($N=16$), open label Study aimed to test whether CBT could sustain IV ketamine’s effects for TRD
- 68.8\% history of psychiatric hospitalization; 38.8\% history of ECT
- Treatment: 12- session, 10-week course of CBT concurrently with a 4- treatment, 2-week course of IV ketamine (0.5mg/kg infused over 40 mins)
- Participants were not required to respond during the first phase prior to receiving CBT.
- The CBT was started 24-48 hours following the first ketamine infusion and was provided twice weekly during the first phase (concurrent with the ketamine but on separate days).
- After 4 weeks of ketamine, CBT was provided weekly for an additional 8 weeks
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- 8 achieved response, 7 remission
- Initial clinical response comparable to other study
- Most patients relapsed after following the weekly CBT portion of the study
- Relapse rate of 25\% at 8 weeks following last ketamine infusion
- The median time-to-relapse 12 weeks
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Conclusions:
• Initial clinical response comparable to other studies.
• May have extended the duration of ketamine antidepressant response.
• Most participants eventually relapsed, the majority did so following completion of the weekly CBT.
• Relapse rate (25% at 8 weeks following last infusion) compares favorably to similar open-label protocols (relapse rates at 4 weeks or earlier following 6 infusions range from 55-89%).
• Median time to relapse (12 weeks) compared favorably to other studies reporting 17 and 24 days (Ibrahim et al., 2012; Mathew et al., 2010).
• Future controlled, larger studies warranted.
KAP Clinic at MGH Aims

• Offer integration psychotherapy to patients under ketamine treatment

• Study the effect of integration psychotherapy in treatment outcome

• Potentially compare integration therapy with directed therapies such as CBT or CAMS
A KAP clinic at MGH

- Take referrals from MGH Ketamine clinic and other ketamine clinics
- Patients can be offered a virtual appointment or in person appointment at the Depression Clinical and Research Center (DCRP; Cost Center)
- There will be an intake 60 min session and follow up 45 min sessions. Patients with draw or journal about their experience prior to arrive to the session.
- Total 1-12 sessions
- Therapy will take place on the days patient does not have an infusion
Components of KAP

• **Preparatory session (setting up the experience):**
  – Set (mindset) and setting (the location) will be discussed
  – Therapeutic alliance
  – Psychoeducation re: ketamine
  – Preparation for the psychedelic experience
  – Instructed to journal, draw

• **Day of the ketamine infusion:**
  – Eye cover to minimize external sensory stimulation and music to maximize the psychedelic experience
  – Vital signs monitored

• **Integration psychotherapy sessions:**
  – Day after ketamine, 50-minute session focused on the content of the psychedelic experience
  – Explore journal/drawing with themes that emerged
  – Insight oriented and open-ended psychodynamic process will be used
A KAP clinic at MGH

- CPT Codes: 90837 or 90792 for first appointments and 90834 for follow up appointments

- Providers (Albert Young, Maren Nyer, Fernando Espi) would first volunteer time and then use a PO model under DCRP
A KAP research project at MGH

- Multisite: Cleveland Clinic + MGH
- Patients 16-24 yo following a suicide attempt admitted to inpatient psychiatry without substance abuse
- RCT: Ketamine 0.5 mg/kg versus placebo + CAMS therapy
- PIs: Amidt Anand and Tatiana Falcone
A KAP research proposal

- High dose ketamine mono therapy Vs. High dose ketamine with integration therapy
- BDI, QIDS, QLESQ and Psychedelic Scales: MEQ, EDI and CEQ
- Integration psychotherapy impacts response and remission rates as well as time to relapse
- Integration psychotherapy impacts QOL
- Psychedelic experience impact QOL, response, remission and time to relapse
Thank you for your attention

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Issues Involved in KAP Clinic at MGH

- Providing psychological support/intervention in an IV clinic
- Insurance reimbursement for intensive time spent with patients
- Two therapists
- Vital sign monitoring
- Hospital regulations
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• KAP effectiveness related to: “a time-out from ordinary, usual mind, relief from negativity, and an openness to the expansiveness of mind with access to self in the larger sense.” (pp. 191)

• “These effects enhance a patient’s ability to engage in meaningful psychotherapy during and after administration. Ketamine is potent for respite, analysis, and meditative presence, and potent for recovery from depression and the lingering effects of trauma.” (pp. 191)
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“In the freedom of an inward journey, absent the emotional constraints of ordinary mind and free of one’s sense of inherent form, a sense of vast space arises. The journey unfolds in different realities that may seem the truth of being, outside of time and space, as if observing our being in different realities. At times, this may be confusing as the experience may be intense with only the observing mind connecting to a sense of self.” (pp. 191)
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CBT treatment:
- Taken from Beck's model and focused on (1) psychoeducation, (2) cognitive restructuring, and (3) behavioral activation/ modification
- Experienced CBT therapists
- Homework included: “Thought Records” and “Activity Charts”