Introduction

- Romantic couple distress is one of the most frequent issues presented to mental health professionals, and relationship betrayals are among the most difficult issues to treat.
- Attachment injuries are defined as an event involving an actual or perceived betrayal of trust or abandonment during a time of need (e.g., infidelity).
- They can be conceptualised as interpersonal traumas, which can cause functional impairment and precipitate symptoms similar to posttraumatic stress disorder (PTSD) in the injured partner.
- Intrusions, re-experiencing, avoidance, hypervigilance / hyperarousal, negative cognitions and mood, depression.
- Trauma exposure over-activates endogenous stress hormones, leading to a powerfully consolidated emotional memory easily triggered by contextual cues.
- Reconsolidation theory posits that reactivation induces a transient period of lability which is vulnerable to pharmacological interference.
- Administration of propranolol, a noradrenergic beta-blocker, 60 minutes prior to memory reactivation can attenuate PTSD symptoms, presumably by reducing the salience of the traumatic memory.

Method

Objectives: To determine whether reconsolidation therapy using propranolol alleviates trauma symptoms and psychological distress in individuals with an adjustment disorder stemming from a romantic betrayal.

- Open-label clinical trial
- Repeated measures with wait-list control

Hypotheses:
1. No significant reduction in symptoms while the participants are on a 4 week waiting list.
2. 6 sessions (1x/week) of memory reactivation under propranolol will significantly reduce trauma symptoms and psychological distress.

Treatment: 1mg/kg of propranolol 1 hour before reactivating the memory of the attachment injury event.

Measures of treatment efficacy:
- Impact of Events Scale-Revised (IES-R)
  - Intrusion, Avoidance, Hyperarousal
  - Hopkins Symptom Checklist-25 (HSCL-25)
  - Depression and Anxiety

Results RM ANOVA: Trial Design

<table>
<thead>
<tr>
<th>Time</th>
<th>V0</th>
<th>V1</th>
<th>V2</th>
<th>V2 + 6</th>
<th>V7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week</td>
<td>1</td>
<td>2-5</td>
<td>5</td>
<td>6-10</td>
<td>11</td>
</tr>
<tr>
<td>N</td>
<td>37</td>
<td>50</td>
<td>42</td>
<td>39</td>
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</tbody>
</table>

Procedure
- Consent + Eligibility evaluation (baseline)
- Waitlist
- Writing injury script under propranolol
- Reading injury script under propranolol
- Post-treatment evaluation

Time
- Total: F(2, 76) = 58.44, p < .001, $\eta^2 = .61$
- HSCL Depression: F(2, 76) = 52.13, p < .001, $\eta^2 = .58$
- HSCL Anxiety: F(2, 76) = 17.81, p < .001, $\eta^2 = .44$

A priori Bonferroni corrected contrasts were significant between T1 and T7, but not between T0 and T1

Characteristics of the Sample (N = 57)

<table>
<thead>
<tr>
<th>Frequencies</th>
<th>Descriptives</th>
<th>M(SD)</th>
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<tbody>
<tr>
<td>Gender</td>
<td>Age (years)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40.6(11.9)</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>38(66.7)</td>
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<tr>
<td>Marital status</td>
<td>Education (years)</td>
<td>17(12.6)</td>
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<tr>
<td>Single</td>
<td>28(49.1)</td>
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<tr>
<td>Divorced</td>
<td>17(29.8)</td>
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<tr>
<td>Type of betrayal</td>
<td>Time since event (years)</td>
<td>3.0(4.0)</td>
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<tr>
<td>Infidelity</td>
<td>36(63.2)</td>
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<tr>
<td>Other</td>
<td>21(36.8)</td>
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<td>SB in same relationship?</td>
<td>Duration of relationship before event (years)</td>
<td>7.6(9.3)</td>
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<tr>
<td>Yes</td>
<td>52(88.1)</td>
<td>9.1(10.1)</td>
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<tr>
<td>No</td>
<td>14(22.8)</td>
<td>3.0(4.0)</td>
</tr>
</tbody>
</table>

Discussion

- Results support the use of reconsolidation therapy under propranolol to treat clinically significant trauma-related symptoms resulting from romantic partner betrayal.
- Re-experiencing and intrusions seem to be particularly important in this population; they were the most severe at baseline and demonstrated the greatest improvement.
- Depression and general anxiety symptoms also significantly improved.
- The treatment was generally well-tolerated among the participants; there were no withdrawals due to the demands of the treatment procedures.

Future directions and limitations:
- Longitudinal research on adjustment disorders resulting from attachment injuries
- Randomized double-blind, placebo controlled trials
- Implementation into clinical practice

References