



### Possible mechanisms of psychiatric comorbidity in AD

- AD and psychiatric conditions may arise from overlapping, dysregulated inflammatory pathways, and may trigger or exacerbate each other<sup>1-3</sup>
- Proinflammatory cytokines have been associated with anxiety and depression<sup>4,5</sup>
- Neuropeptides involved in stress, anxiety and depression can modulate AD disease activity<sup>6,7</sup>
- Sleep disturbance may partially explain the link between AD and psychiatric disorders<sup>2,4,8</sup>



### Considerations for managing mental health comorbidities in AD

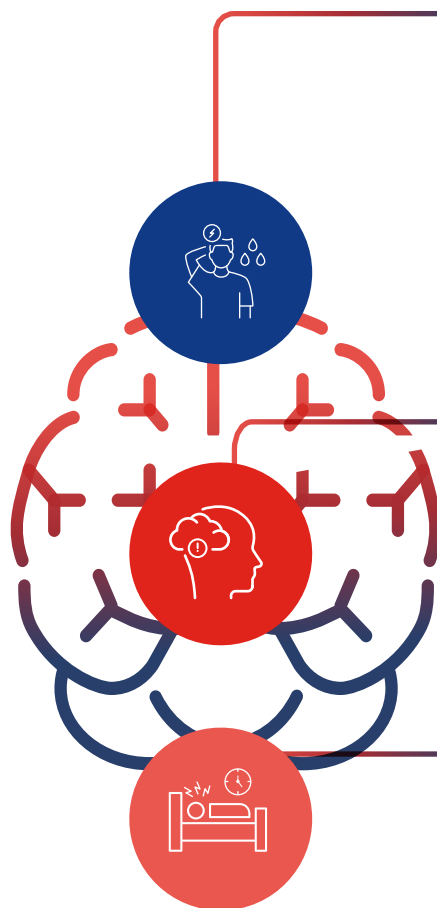
- Anxiety and depression have been shown to correlate with AD severity<sup>9</sup>
- Consider screening your patients with AD for anxiety and depression<sup>3,8,10,11</sup>
- Improved control of AD signs and symptoms may help resolve anxiety and depressive symptoms; psychiatric comorbidities may warrant a step-up to systemic therapy for some patients<sup>8,10</sup>



### Useful resources

**Anxiety and Depression Association of America**  
Includes a wealth of information and educational materials for both clinicians and patients

Visit website



Up to **87%**  
of adults with  
AD suffer sleep  
disturbance<sup>c17</sup>

### Anxiety and depression

Patients with AD are significantly more likely to self-report symptoms or receive a clinical diagnosis of anxiety or depression<sup>10,12,13</sup>.



Patients with moderate-to-severe AD are significantly **more likely to medicate** for their anxiety/depression<sup>a13</sup>

- **Anxiolytics** HR (95% CI): **1.7 (1.6-1.8)** vs. general population
- **Antidepressants** HR (95% CI): **1.2 (1.2-1.3)** vs. general population



1 in 4 AD patients **report depressive symptoms**<sup>10</sup>



1 in 6 AD patients **have clinical depression**<sup>10</sup>

### Suicidal ideation and behaviour

The risk of suicide in AD patients is low<sup>13</sup>. Nevertheless, patients with AD are more likely to experience suicidal ideation and are at higher risk of suicidal behaviors and self-harm<sup>14,15</sup>.



Compared with non-AD controls, AD patients are **significantly more likely to experience suicidal ideation**, OR (95% CI): **1.4 (1.3-1.7)**<sup>14</sup>



AD patients are also **significantly more likely to self-harm**, RR (95% CI): **1.4 (1.3-1.5)**<sup>b15</sup>

### Sleep disturbance

Patients with AD often have impaired sleep, resulting in fatigue, daytime sleepiness, irritability, disturbed cognition, and decreased motor performance<sup>16</sup>.



Itch due to AD is a major cause of **impaired sleep**, although other factors, such as disrupted circadian rhythm, allergens, and cytokine dysregulation, may also be involved<sup>16,17</sup>



Sleep disturbance may also **worsen AD** by increasing inflammation, pain perception, itching and scratching, and chronic stress<sup>17,18</sup>

Sleep disturbance worsens quality of life and overall health in AD patients<sup>16</sup>



Find out more about mental health comorbidity in AD in our video with Dr. Valerie Callender

[Click here to watch the video](#)  
or scan the code using the camera on your mobile device

Notes: <sup>a</sup>The study was conducted in Danish adults with AD using data from a nationwide registry and population-based questionnaire; <sup>b</sup>This retrospective study analyzed all NHS hospital discharges and mortality data from 1999 to 2011 in England, the findings may not be generalizable beyond this specific healthcare setting and population; <sup>c</sup>This statistic is based on patient-reported questionnaire data. While subjective assessments provide valuable insights, objective sleep studies in AD remain limited.

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