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## A Case of Successful Treatment of Skin Excoriation Disorder with N-Acetyl Cysteine

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### Introduction

Excoriation (skin picking) disorder, also known as pathologic skin picking, psychogenic or neurotic excoriation, or dermatillomania is characterized as the repetitive, compulsive picking of skin leading to skin damage and distress or impairment in functioning. Excoriation disorder is a new addition to the DSM-5, separating itself from obsessive compulsive disorder and body dysmorphic disorder. Grant and colleagues reference 2 community studies examining the prevalence of skin picking disorder and found rates to be between 1.4% and 5.4% of the general population<sup>(1)</sup>. DSM-5 criteria highlights failed attempts to stop or cut down on the behavior as well as excessive time or secondary impairment caused by the skin picking. Some patients spend hours each day picking, others suffer social consequences secondary to the degree of tissue damage, often found on their faces.

Treatment of skin picking disorder is based on psychotherapy, including cognitive behavioral therapy and habit reversal therapy, as well as pharmacotherapy. A recent randomized, double blind trial was conducted showing efficacy of N-acetylcysteine (1200-3000 mg/d) in reducing symptoms of excoriation disorder<sup>(3)</sup>. We present a case of a middle aged patient with excoriation disorder since age 15 who experienced significant improvement after treatment augmentation with N-acetyl cysteine. The patient suffered a single-use relapse of her alcohol and stimulant use disorder roughly 1 month prior to initiation of NAC. This is of importance because, although inconclusive, there are reports of NAC decreasing urges and use of cocaine in addicts.

### Case Description

A 59 year-old-female suffering from 44 years of unsuccessfully treated excoriation disorder presented with symptoms of unspecified depression, OCD and stimulant use disorder. She was referred by her surgeon for psychiatric management. He had postponed a revision of her hip replacement due to self-excoriation of the right axillary lymphadenectomy site.

She was diagnosed with right breast cancer over 10 years ago, and was status post radical mastectomy of the right breast. She had been using cocaine and alcohol for the past couple of years. She had episodes of extended sobriety yet still had skin-picking.

She continued to pick at her surgical site, which caused her wounds to remain fresh and sore. She self-reported that she struggled with efforts not to pick and even attempted to wear gloves at bedtime to prevent herself from picking through the night. The patient had been taking paroxetine 60mg per day which she reported had helped only minimally.



Fig. 1 Picture taken of right axillary wound as a result of self-excoriation.

We initiated N-acetyl cysteine as it has been shown to be effective in excoriation disorder<sup>(3)</sup>. N-acetyl cysteine was initiated at 1200mg per day, titrating this to 2400mg per day. Patient was also referred for weekly cognitive behavioral therapy sessions. There has been significant improvement at the surgical site as observed during the subsequent three monthly follow ups.

### Discussion

This is another case report highlighting improvement of excoriation disorder with the adjunctive use of N-acetylcysteine.

N-acetylcysteine is used to treat acetaminophen overdose and to loosen mucus in cystic fibrosis. It is available over the counter in health food stores.

Currently, N-acetylcysteine is being used for other neuropsychiatric disorders including cocaine, marijuana and smoking addictions, Alzheimer's and Parkinson's disease, compulsive and grooming disorders, autism, bipolar disorder and schizophrenia<sup>(2)</sup>. The use of N-acetylcysteine in cocaine remains inconclusive yet some reports show efficacy for reducing cravings and use<sup>(2)</sup>. Our patient was in active maintenance phase of cocaine use. Little is known about the use of N-acetylcysteine in the maintenance phase of cocaine use disorder. We hope our patient will continue to benefit from potential benefits of N-acetylcysteine including reducing excoriation as well as cocaine cravings and use.

### References

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