

**SUMMARY OF:**  
**AN 8-YEAR RETROSPECTIVE REVIEW OF PATCH TESTING WITH RUBBER ALLERGENS:**  
**THE MAYO CLINIC EXPERIENCE**

By: Margo J. Bendewald, Sara A. Farmer, and Mark D.P. Davis

**BACKGROUND**

There is a continued increase in allergic contact dermatitis due to chemicals found in rubber. Synthetic rubbers (non-latex) are increasingly common in medical and household products due to latex sensitivity allergies. The rubber allergens are now an important contributor to allergic contact dermatitis.

**OVERVIEW**

The authors conducted a patch test study on patients from January 1, 2000 through December 31, 2007. The patients were patch tested with a standard allergen series and a specialized rubber allergen series. All patients were previously suspected of having an allergic contact dermatitis and were referred to the Mayo Clinic for patch testing. The goal of the study was to report results from the standard allergen and specialized rubber allergen series to uncover the total allergic patch-test rubber reaction rate.

**RESULTS**

The most common site of allergic dermatitis was the hand (49.7%), and the most common occupation that a patient with dermatitis had was healthcare worker (16.3%). Patients were tested with a rubber allergen series of 27 allergens and a standard series including 6 rubber allergens. Out of the 773 patients, 739 patients were tested with both standard and rubber allergens. 245 patients (31.7%) had a positive reaction to at least one rubber allergen. In the rubber series, 4,4-dithiodimorpholine 1% yielded the largest number of positive reactions (9.8%). The second highest level of allergic reactions was thiuram mix at 7.6%.

**CONCLUSION**

When a special rubber allergen series was used in this study the number of patients with positive patch-tests doubled when diagnosing a rubber allergy. Consideration should be given to including a special series of rubber allergens when testing patients for contact dermatitis allergic rubber allergies.

---

**References** 1. Bendewald. An 8-Year Retrospective Review of Patch Testing with Rubber Allergens: The Mayo Clinic Experience. *Dermatitis*, Vol 21, No 1 (January/February), 2010: pp 33-40.

This summary is written and provided by Ansell Healthcare Products LLC. Ansell Healthcare has attempted to summarize the published study as accurately as possible, but makes no representation to the accuracy of the summary. We refer the reader to the actual study for additional information.

Ansell Healthcare Products LLC  
111 Wood Avenue, Suite 210  
Iselin, NJ 08830 USA  
Tel: + 1 732.345.5400  
Fax: + 1 732.219.5114