

Gutta Percha Allergies?

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Cross-Reactivity studies of gutta-percha, gutta-balata, and natural rubber latex (*Hevea brasiliensis*).

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Gutta-percha and gutta-balata are derived from the *Paliquium gutta* and *Mimusops globosa* trees, respectively, that are in the same botanical family as the rubber tree *Hevea brasiliensis*. For this reason the potential for immunological cross-reactivity between the gutta-percha and gutta-balata used in endodontics and natural rubber latex (NRL) has been the subject of some controversy, because these products may be used in latex-allergic individuals. The objective of this study was to investigate the potential cross-reactivity between gutta-percha, gutta-balata, and NRL. Physiological extracts of seven commercially available gutta-percha products, raw gutta-percha, raw gutta-balata, and synthetic transpolyisoprene were each analyzed for cross-reactivity with NRL in a competitive radioallergosorbent test inhibition assay. No detectable cross-reactivity was observed with any of the raw or clinically used gutta-percha products. In contrast the raw gutta-balata released proteins that were cross-reactive with *Hevea* latex. We conclude that the absence of gutta-percha proteins that can react with *Hevea* latex-specific IgE antibody supports the minimal potential for commercially available gutta-percha to induce allergic symptoms in individuals sensitized to NRL. Because gutta-balata is sometimes added to commercial gutta-percha products caution should be exercised if products containing gutta-balata are used in endodontic care of latex-allergic individuals.