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.