Turmeric Extracts Containing Curcuminoids Prevent Experimental Rheumatoid Arthritis

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SUPPORTING DATA

Footnote: Dedicated to Dr. Norman Farnsworth of the University of Illinois at Chicago

for his pioneering work on bioactive natural products.

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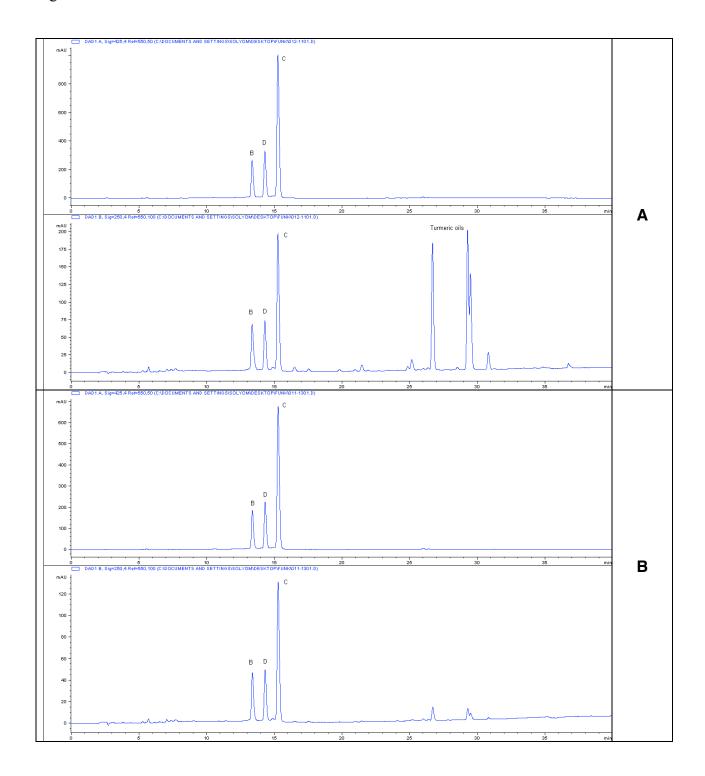
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Figures

- S1. HPLC Chromatograms of (A) crude turmeric methanol extract, (B) essential oildepleted turmeric fraction, and (C) purified curcuminoids (commercial curcumin) demonstrating three curcuminoid peaks common to all extracts and depletion of essential oils in samples (B) and (C). Samples(10 μL) were injected onto a Synergy, 4μ, Hydro-RP 250x4.6 mm column coupled with SecurityGuard AJO-4287 guard column (Phenomenex, Torrance, CA 90501). The mobile phases were (A) 500 μL acetic acid/L of Nanopure water and (B) 500 μL acetic acid/L of acetonitrile. The eluent was monitored at 425 nm, 370 nm, 280 nm and 250 nm; the flow rate was 1 mL/min.
- S2. Effect of turmeric fraction on joint inflammation. Female Lewis rats were injected on day 0 with SCW (25 μ g/g) or vehicle. Joint swelling was assessed by daily calculation of the arthritic index (mean \pm SEM) with statistical significance determined by Students' T test as described in methods. (A) Turmeric fraction (23 mg/kg/d) or vehicle alone ip injections were begun 4 days prior to SCW administration (n=11 animals/group) and continued on a daily basis until 10 days after SCW injection at which time treatment frequency decreased to 5 days/week. * p < 0.01. (B) Turmeric fraction (23 mg/kg/d) or vehicle alone ip injections were given daily beginning 8 days after SCW administration (n=10-11 animals/group). * p < 0.01. (C) Turmeric fraction (4 mg/kg/d) or vehicle alone ip injections were begun 4 days prior to SCW administration (n=11 animals/group) and continued on a daily basis until 10 days after SCW injection at which time treatment frequency decreased to 5 days/week. * p < 0.05.

Figure S1



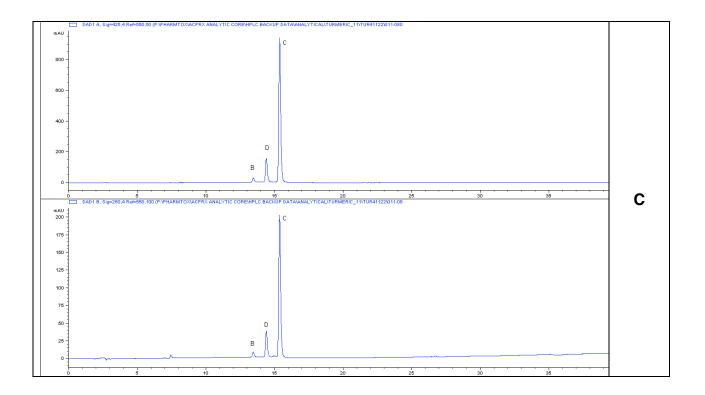


Figure 3A

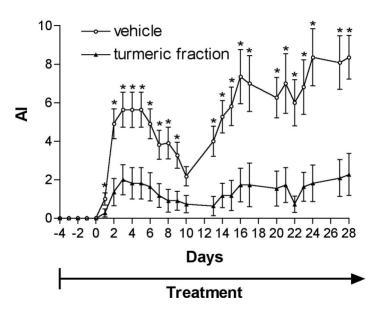


Figure 3B

