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[\[PDF \(542K\)\]](#) [\[References\]](#)**Serum aconitine concentrations after taking powdered processed
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ABSTRACT

Processed Bushi powder for ethical dispensing, called TJ-3022, is a herbal drug of processed Aconiti tuber (*Aconitum carmichaeli* Debeaux) and TJ-3023 is newly developed to contain a higher proportion of diester alkaloid of aconitine (*Aconitum carmichaeli* Debeaux and *Aconitum japonicum* Thunberg). Safety of TJ-3022 and TJ-3023 was evaluated by measuring the level of aconitum alkaloids in healthy adult volunteers. Forty subjects were assigned to one of two groups (each 20 subjects): TJ-3022 group or TJ-3023 group. The subjects received the powdered processed Aconiti tuber 3 g/day and the blood concentrations of aconitum alkaloids were measured at 90 min and 72 h after taking the study drug. The serum concentrations of aconitum alkaloids after 90 min and 72 h in the TJ-3023 group were higher than those in the TJ-3022 group. As for the chronological changes in the serum concentration, a significant decrease was observed in the TJ-3022 group, while no significant decrease was seen in the TJ-3023 group, which suggests that an analgesic effect in TJ-3023 was stronger than in TJ-3022. Aconitum alkaloids, which always have been believed to have the blood concentration below the measurement limit in human, were detected for the first time, although the detected amounts were minute. The results suggest that TJ-3023 shows sufficient analgesic effect with smaller dose than TJ-3022.

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