

**DEVELOPMENT AND STANDARDIZATION OF *DASHAMULADI TAILA* ROLL-ON IN
THE MANAGEMENT OF *SHIRAH SHOOLA***

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Dashamuladi taila is a traditional Ayurvedic preparation described in the Bhaishajya Ratnavali, recommended for the treatment of head-related disorders (*Shiro-roga*). It contains *Brassica campestris* L. (Mustard oil) as the base, along with well-known 10 *Dravyas* classified under '*Dashamula*' and *Vitex negundo* Linn. (*Nirgundi*). This study focuses on the development and standardization of *Dashamuladi Taila* Roll-On in the management of *Shirah shoola* due to its convenient application, improved portability, and patient compliances. The oil was prepared according to the traditional *Taila paka kalpana* method and converted into a roll-on formulation by incorporating 12% Menthol crystals. Preliminary standards were developed for the novel dosage form, and a comparison was made between the authentic formula and the novel formulation. The roll-on showed a dark greenish-brown color, a smooth, non-greasy texture with pleasant herbal aroma while prepared authentic oil sample was thick and sticky in texture. Key physicochemical parameters of the roll-on sample such as acid value (3.5904), peroxide value (0), saponification value (0.19074), refractive index (1.473), density (1.052 g/mL), and specific gravity (1.052) confirmed its consistency and safety. HPTLC analysis revealed the chromatographic characters of the novel form and the authentic form. Both the samples demonstrated similar number peaks in the HPTLC profiles. The roll-on formulation exhibited the peaks at R_f values similar to those of the oil, but with differences in intensity and area. However, these results highlighted the retention of key phytochemicals in the roll-on, with minor variations in peak areas. The results validate the roll-on formulation as pharmaceutically safe and stable alternative to traditional *Dashamuladi taila*. Future studies should focus on safety evaluations and comparative clinical trial to confirm the therapeutic use of *Dashamuladi taila* roll-on in clinical settings.

Keywords: *Dashamuladi taila*, Roll-on formulations, *Shirah shoola*, Ayurveda, Standardization