conferenceseries.com SciTechnol

J Pharm Sci Emerg Drugs 2017, 5:2
DOI: 10.4172/2380-9477-C1-003

Formulation and evaluation of herbal extract coated pellets with anti-inflammatory and anti-arthritic activity for prophylactic daily use as food supplements

Sandeep Arora
Chitkara University, India

With increasing incidences of hepatitis, fibrosis and cirrhosis due to lifestyle changes, food habits, drug adverse effects, alcoholic and fatty damage, it is relevant that focus should now be in prophylactic and preventive measures, to take care of day to day factors causing cellular injury and inflammatory processes. Traditional foods and traditional therapeutic systems over including Ayurveda point to the benefits of regular herbal intake, which indirectly provided a prophylactic anti-inflammatory activity and show anti-arthritic action. Slurry comprising herbal extracts was prepared by suspending in a solution of the excipients, dissolved or suspended in sufficient water and Isopropyl alcohol (IPA) to make the slurry sprayable. After milling through a machine adapted for grinding suspension in order to reduce the particle size of extract (grinding in suspension form is desirable because it avoids dust generation and containment problems, which arise in grinding dry powder drugs), the suspension was applied on the excipient pellets in the classic pharmaceutical fluidized bed coating device, which consists simply of a vertical cylinder with an air-permeable bottom and an upward spraying nozzle close above the bottom or a downward-spraying nozzle mounted above the product mass. The cylinder was charged with particles to be coated, sufficient volume of air was drawn through the bottom of the cylinder to suspend the mass of particles and the liquid to be applied was sprayed onto the mass. The temperature of the fluidizing air was balanced against the spray rate to maintain the mass of pellets at the desired level of moisture and stickiness while the coating was built up. A finishing layer over the extract layer is not necessary in every case, but frequently improves the elegance of the product and its handling, storage and machinability and may provide further benefits as well. 1% of an anti-static ingredient such as talc or silicon dioxide simply dusted on the surface of the pellets and other coats were applied. The pellets were made palatable and colored with colorant and flavors were added to increase patient compliance for daily intake as prophylactic food and optimized for uniformity of content, dissolution and moisture content and then for anti-inflammatory and anti-arthritic activity.

sandeep.arora@chitkara.edu.in