

## Advances in biomaterials in rhinology

**Amulya T M**

JSS Academy of Higher Education and Research, Mysore, India

The scope and applications of biomaterials have spread out throughout a broad spectrum. Particularly in pharmacy, biomaterials are an attractive choice because they can be modified to decrease toxicity, increase the targeting ability among many other aspects of drug delivery. Extensive studies have led to the development of many metal-based, ceramic, biocompatible and biodegradable biomaterials for medical purposes among many others. The utilization of 3D printing in this discipline is a very novel research subject with infinite potential. Personalized and customized nasal implants are a great option to increase patient compliance and 3D printed accurate anatomical structures are rendered to be effective tools of learning. One of the disadvantages of biomaterial-based implants is the formation of a thick fibrous capsule formation around the implant, others being breakage, soft tissue loss and so on. Regulatory aspects are less explored for

nasal implants. 3D printing is a unique technique that allows for a high degree of customization in pharmacy, dentistry and in designing of medical devices. Current research in 3D printing indicates towards reproducing an organ in the form of a chip; paving the way for more studies and opportunities to perfecting the existing technique.

### Speaker Biography

Amulya T M is a young and energetic ENT surgeon. Complete her masters in 2017. She underwent short term training under the world renowned skull base surgeon Dr Narayanan Janakiram. She is also in charge of the dysphagia unit at JSS hospital, Mysore, India since 2019. In January 2020, she cleared the DNB exams and also enrolled for part time PhD at JSS Academy of Higher Education and Research. She has 10 publications and 1 patent to her name .

**[damulyathotambailu@gmail.com](mailto:damulyathotambailu@gmail.com)**

**Received: Feb 07, 2022 Accepted: Feb 10, 2022 Published: March 24, 2022**