

# Concept of Dattatreya Mukherjee Sponge Holder Forcep

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## 1 Introduction

Sponge Holding Forceps are one of the key instrument in any kind of surgeries. Sponge holding forceps are used to grasp gauze or swab while conducting a medical procedure. (1) Sponge holder forceps play a key role in the sterilization procedure. Before starting the surgery, sterile painting is very important. Ideally, two times painting should be done with two different sponge holder forceps. This increase the cost of the surgery and autoclaving burden which will affect the concept of the "green surgery". (2) Different types of jaws of Sponge Forceps: 1. Straight Smooth Jaws 2. Curved Smooth Jaws 3. Straight Serrated Jaws 4. Curved Serrated Jaws

In normal sponge forcep, the chance of sterility breakdown in more. After first time of painting, it is advised to change the sponge forcep and the betadine bowl. In many resource limited setup, this protocol is not followed strictly. These also increase the burden of autoclave. So, I am giving a concept of modified sponge holder, Dattatreya Mukherjee sponge holder forcep.

## 2 Concept

Disposable sterile Cap is used in the jaw. Surgeon can put the cap in the jaw. After one time painting, surgeon can puss a button, the cap will automatically ejected. then Surgeon can put another pair of sterile cap. With this there is no need of changing the Sponge Forceps.

In the arm of the sponge forcep, two betadine filled container will be present. A piston will be attached with each betadine holder. Upon, pressing the piston, betadine will travel to the jaw and the gauze will be soaked. There will be two Betadine holder for two time paintings.

## 3 Image of Concept

The Image has been shown in Fig 1

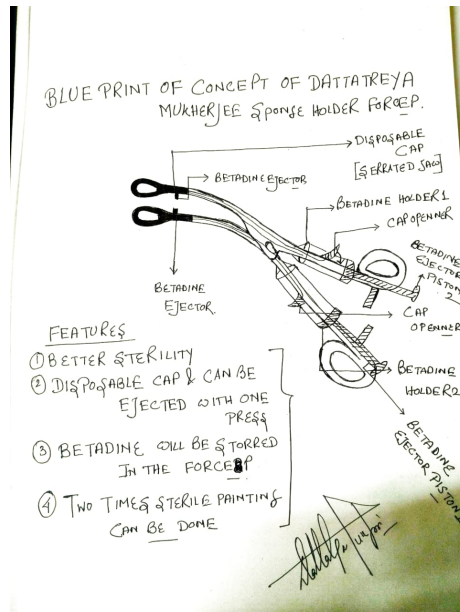


Figure 1: Concept and Blueprint of Modified Sponge Holder Forcep

## 4 Features

1. Better Sterility 2. Disposable Cap can be ejected with one press 3. Betadine will be stored in the arm of the Forcep 4. Two times sterile painting can be done 5. Reduction of Autoclaving burden 6. Reduction of Cost

## 5 Reference

1. <https://www.surgicalholdings.co.uk/general/sponge-holding-forceps/> 2. <https://xelpovsurgical.com/product/sponge-forceps/>