**Stainless steel crowns** are prefabricated crown forms which can be adapted to individual primary molars and cemented in place to provide a definitive restoration.

They are prefabricated and present in the clinics and you just need to choose the correct size after minimal preparation of the tooth.

They are also called preformed metal crowns (PMCs.)

The best practice for management of carious primary molars involving 2 or more surfaces is the placement of a preformed metal crown. Although SSCs are more expensive, plastic restorations have a higher failure rate and will need to be replaced so the cost will add up.

SSCs are available for anterior and posterior teeth but mostly are used for posterior teeth. For anterior teeth you can use SSCs with anterior veneers for better esthetics but these types aren’t used much nowadays.

SSC are also available for permanent molars, when you have a badly destructed 6 or child with MIH, in these cases SSC will be treatment of choice. And here also SSC are available chairside.

SSC for permanent molars are harder and more challenging to do than for primary molars but in the end they can give us a clinically good result.

* **Advantages:**

1. Extremely durable (will serve for the lifetime of the tooth) and superior to multi-surface fillings.
2. Relatively inexpensive. (If you compare the longevity with fillings)
3. Minimal Technique Sensitivity during placement (unlike composite they need minimal isolation, minimal technique sensitive).
4. Offers advantage of full tooth coverage. Less risk of recurrent caries.

* **Indications:**
  1. Restoration of carious primary molars with extensive carious lesions. So removal of caries will leave insufficient sound tooth structure to retain the restoration. In that case, the child is much better to treat with a SSC.
  2. Following pulpotomy and pulpectomy procedures. Pulpally treated teeth tend to be brittle and are liable to fracture.
  3. Restoration of fractured primary molars. (Due to trauma)
  4. Restoration of teeth affected by localized or generalized developmental problems. Examples are amelogenesis imperfecta, enamel hypoplasia, and dentinogenesis imperfecta
  5. Restoration and protection of teeth exhibiting extensive tooth surface loss from attrition, abrasion or erosion. (Not very common in children, mostly seen in adults)
  6. In patients with high caries susceptibility. SSCs better than fillings in this case.
  7. An abutment for certain appliances such as space maintainers.( the crown and loop space maintainer, its main disadvantage is that the crown needs to be replaced in case of fracture of the loop and it will be very difficult to remove.)
  8. Patients where routine oral hygiene measures are impaired (patients with especially needs) because breakdown of intacoronal restoration is more likely.
  9. In patients undergoing restorative care under GA if two or more surfaces are involved. if the pt. is uncooperative you should do your best that he doesn’t go under GA another time.
  10. For infra-occluded primary molar to maintain the mesio-distal space and vertical dimension.
* **Contraindications:**

1. If the primary molar is close to exfoliation with more than half of the roots are resorbed.
2. Patients with a known nickel allergy or sensitivity.(SSC had high percentage of nickel (70%),nowadays it’s much less (9-12%)

* **Rationale:**

SSC are flexible and elastic. They are capable of bending easily without breaking. If we look at the anatomy of the primary molar, we have a buccal bulge. The SSC is flexible enough so it bends over the buccal bulge. Once it goes over it, because it is elastic, it’s capable of resuming its original shape. When trying the crown first we enter it lingually then bucally over the buccal bulge, the SSC goes back to its original shape and becomes locked and here we get the retention. That’s why we don’t prepare the buccal or lingual surface of primary teeth.

The tooth cervical bulge is surrounded by the crown. This is important for retention. The snap snound means good size and fit