

**Table 2: Advantages and Disadvantages of Various Generations of Periodontal Probes****FIRST GENERATION PROBES: Williams, CPITN, UNC-15, University of Michigan O, Goldman Fox, Glickman, Merritt A and B, Naber's****Advantages:**

- Easily available and inexpensive
- Tactile sensitivity is preserved
- Even in presence of subgingival calculus probe can be inserted with little navigation by the operator
- Tip is rounded to avoid tissue trauma
- Color-coded for easier and faster identification of readings

**Disadvantages:**

- These probes are heavy
- Probing force is not controlled so the tip of the probe may pass beyond the base of the pocket
- Errors during visualizing the readings are possible
- An assistant is needed to transfer the readings to the chart

**SECOND GENERATION PROBES: True Pressure Sensitive, Yeaple****Advantages:**

- Standardization of probing forces
- Comfortable to the patient
- Constant pressurer

**Disadvantages:**

- Probe tip may pass beyond the junctional epithelium in inflamed sites
- Reading has to be performed manually, and an assistant is needed to record the same on the patient chart
- No computer storage of data

**THIRD GENERATION PROBES: Toronto Automated, Florida Probe, InterProbe, Foster-Miller****Advantages:**

- Standardization of probing forces
- Errors in reading the probe and transferring the data are eliminated.
- Printout of the data from the computer can be used for patient education

**Disadvantages:**

- Tactile sensitivity is decreased
- Probe may pass beyond the junctional epithelium in inflamed sites, overestimating the pocket depth
- After the inflammation has resolved, probe may not penetrate beyond the long junctional epithelium, leading to underestimation of the pocket depth

**FOURTH GENERATION PROBES:****Advantages:**

- Three-dimensional probe
- Sequential probe positions are measured

**Disadvantages:**

- Under development
- Invasive probe

**FIFTH GENERATION PROBES: UltraSonographic (US)****Advantages:**

- A noninvasive probe that provides painless probing to the patient
- There is no question of probe passing beyond the junctional epithelium, as ultrasound waves detect, image, and map the upper boundary of periodontal ligament
- Computer storage of data and printout or visuals can be used for patient education
- Guidance path is predetermined
- Provides information regarding condition of the gingival tissues

**Disadvantages:**

- Expensive
- Operator needs to understand the images provided by the computer
- Requires a learning curve