## Scientific Facts

### Properties of Botulinum Toxin
- Known as bacterium clostridium botulinum
- First approved for therapeutic usage in 1989
- Inhibits release of Acetylcholine (Ach)
- Reduces intensity of muscle contraction
- One of the most poisonous biological substances known
- Eight separately distinguished exotoxins: A, B, C1, C2, D, E, F, G
- Types A & B are used in dentistry

## Treatment

#### Disorders
- High lip line “Gummy Smile”
- Temporomandibular disorders
- Clenching/Bruxism
- Masseter hypertrophy
- Silorrhea
- Mandibular spasms
- Deep nasolabial folds
- Radial lip lines
- Black triangles between teeth

## Expectations

### Advantages
- Minimally invasive
- Surgical alternative
- Psychological benefits
- Low risk of side effects

### Disadvantages
- Short-term results
- Numerous maintenance injections may be required
- Potential safety hazard

## Conclusion

Botulinum toxin is an emerging, innovative dental treatment that has been proven to treat a range of dental disorders. The dental industry is evolving, and botulinum toxin dental therapy is the next step into the future.