

# Adolescent Treatment with the Invisalign Appliance

Study Results and Conclusions,  
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### **Summary of Study Conclusions:**

Invisalign has been *shown to be effective* in the treatment of teens.

(p. 2)

Teens were *found to be compliant* with Invisalign to achieve desired results.

(p. 5)

Teen oral *hygiene was maintained* during treatment with Invisalign.

(p. 6)

### **Study background**

- 34 patients enrolled, ages 12–18 at start of treatment
- Patients were Class I with crowding and/or spacing as chief complaint
- Study conducted in two private practice orthodontic specialty offices from October, 2002 through May, 2003.



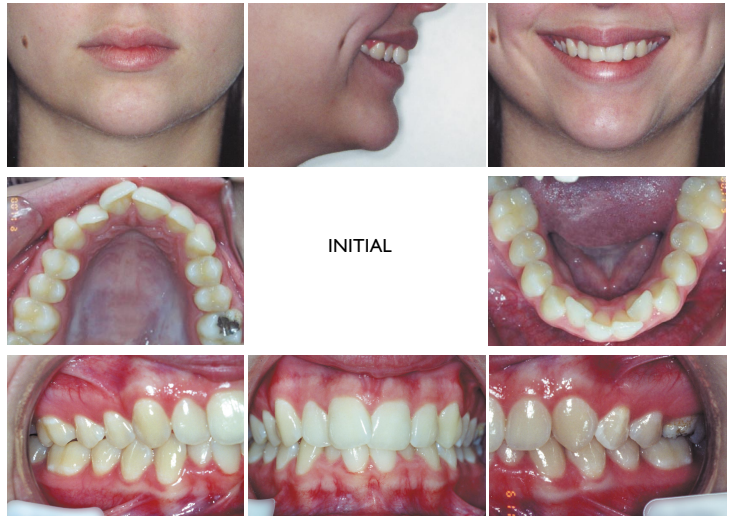
## Study Case #1

Age at start of treatment: 17 years, 8 months

Aligners: 27 upper/36 lower, plus 2 additional lower refinement Aligners

Total treatment time: 15 months

**Initial.** This patient presented with a Class I malocclusion with moderate crowding. A moderate deep bite was also present.



**Final.** The final photos show a solid Class I molar and canine relationship with complete resolution of the crowding. The width of attached gingiva on the facial of the lower incisors has been maintained.

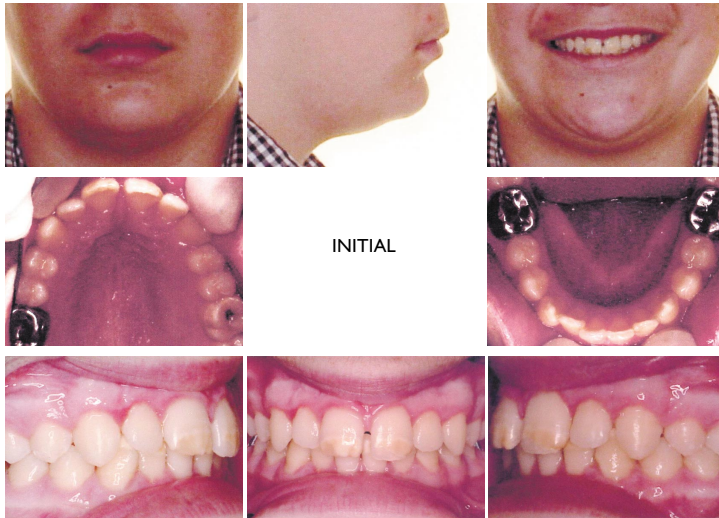


## Study Case #2

Age at start of treatment: 13 years, 8 months

Aligners: I6 upper/I6 lower

Total treatment time: 8 months



**Initial.** This patient presented with a Class I malocclusion characterized by lower anterior crowding and upper anterior spacing. The resultant overjet allowed for a deep Curve of Spee, which is evident in the deep bite. Note also the distal crown tip of the upper right central incisor. Also worth noting is the poor oral hygiene.



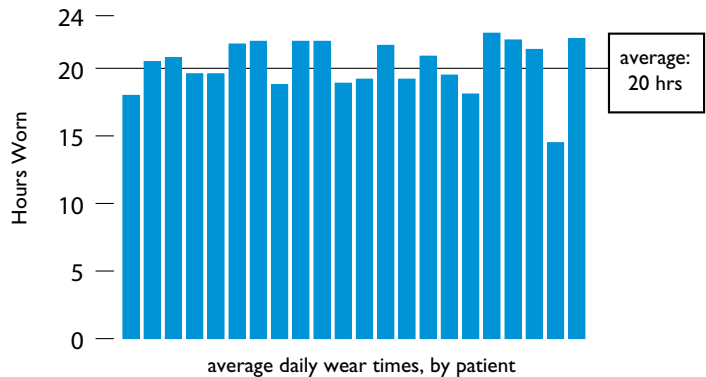
**Final.** The final results show maintenance of the Class I relationship and a resolution of the arch length discrepancies. Ideal overbite and overjet have been achieved. The crown tip of the upper right central is now correct as well. The oral hygiene has not improved, but there is no evidence of decalcification.

# Teens were found to be compliant with Invisalign to achieve desired results.

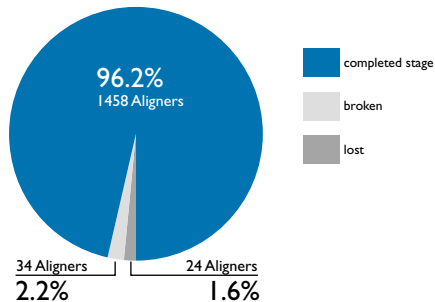
Conclusion based on:

- *Patients averaged wearing their Aligners 20 hours per day over duration of treatment.*
- Low incidence of lost (1.6%) or broken (2.2%) Aligners
- 86% of patients maintained compliance through the end of treatment

## Compliance with Aligner Daily Wear Requirements



## Compliance with Aligner Care Requirements



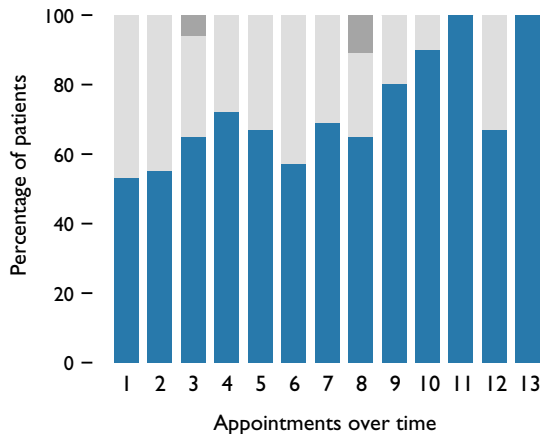
# Teen oral hygiene was maintained during treatment with Invisalign.

Conclusion based on:

- The amount of plaque and degree of gingivitis did not increase over the period of treatment.
- Self-reported oral hygiene habits improved over the length of treatment.
- Studies have shown that the amount of plaque, gingivitis, and decalcification is higher in those with braces than those without. (Mizrahi, 1982; Gorelick, 1982; Huser, 1990)

## Amount of Plaque Found at Appointments

- None: no plaque detected
- Some: a thin film is present
- A lot: soft debris is present



## Degree of Gingival Inflammation Found at Appointments

- None: good oral hygiene
- Somewhat: some inflammation
- A lot: very inflamed, concern about oral hygiene

