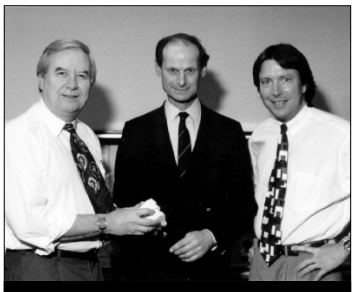
DR. AND MRS. PARKHOUSE AT THE HELM OF AMERICA'S CUP RACING YACHT, CANADA 2. (SEE AMERICA'S CUP PAGE 4.)

TIP-EDGE TODAY tm

Published Quarterly In The USA



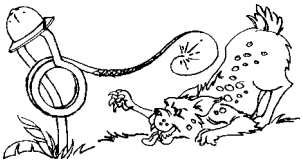
DRS. TOM ROCKE, RICHARD MARX (FROM LONDON) AND CHRIS KESLING DURING A VISIT AT THE ORTHODONTIC CENTER.

SUMMER 1995

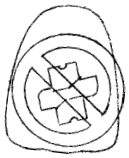
EDGELINES

TAMING CANINES IN SOUTH AFRICA:

By exerting their power over canines, Side-Winder springs can enhance molar relationships and simultaneously correct midline discrepancies. Q's & A's Page 2.

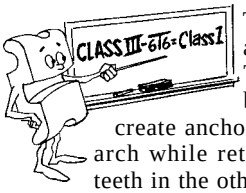


BRACKET POSITIONING IMPORTANT:



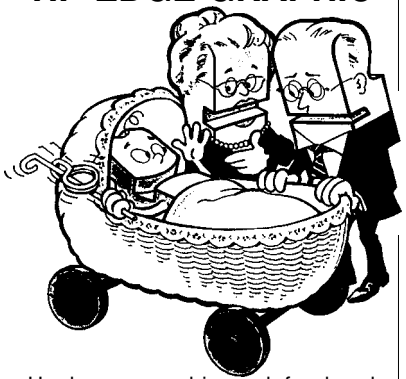
Proper positioning of brackets important to capture built-in preangulation. Page 3.

TIP-EDGE HAS SOLUTION TO DIFFICULT PROBLEM:



The unique ability of Tip-Edge brackets to create anchorage in one arch while retracting ten teeth in the other provides unique solution to skeletal discrepancy. Case Report Page 3.

TIP-EDGE GRAPHIC

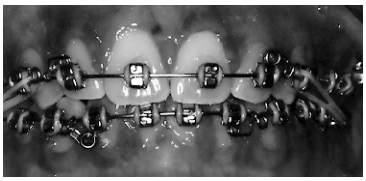


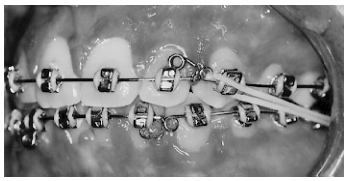
He has your chin and forehead Hartley, but where on earth did he get that smile?

Accelerated Treatment Results Using Gentlest Forces

By Clarence E. Shelton, Jr., D.D.S.

The article entitled, "Decreased treatment time due to changes in technique and practice philosophy," by Shelton et al, sparked many requests for additional information since it appeared in the December 1994 *American Journal Of Orthodontics and Dentofacial Orthopedics*.[1] Here is some of the additional information requested most.





Progress Photos – 7 months

To review, the study evaluated the impact of practice modifications on treatment time in the private office of a board certified orthodontist treating to ABO ideals. All malocclusions were Class I adult dentitions, treated nonextraction. One group (28 patients) was treated with the standard Begg technique and conventional office procedures. The other group (25 patients) was treated with the Tip-Edge appliance along with additional treatment acceleration techniques. The Tip-Edge group had an average treatment time of 12.8 months compared to 20.9 months for the Begg group.

Pretreatment

Deband – 12 months

Some of the parameters identified as contributing to the accelerated results in the Tip-Edge patients include:

1. Tip-Edge Bracket Design – Two beveled opposing corners of the bracket slot allowed limited, free crown tipping, facilitating speedy correction of intermaxillary discrepancies, and interproximal space closure, each with very light 2 oz. elastic traction. The preadjusted horizontal Tip-Edge slot offered additional advantages not present with the Begg vertically directed archwire slot: Easier archwire insertion and removal using elastomeric rings rather than a variety of brass pins; easy addition of auxiliary attachments such as rotating springs and uprighting springs using the generously sized vertical slots (which were not also doubling as the primary archwire retention device, as in the Begg appliance); precision finishing was enhanced by the preadjusted bracket features; and the unbeveled opposing corners of the bracket slot limited mesiodistal action of uprighting springs, stopping uprighting at the ideal angulation.

2. Completion Target – At the outset of treatment, the month and year of expected completion was discussed with the patient and boldly annotated on the front of the treatment record.

3. Per Visit Targets – The overjet measurement was recorded on the treatment record at each visit. At least 1mm improvement was the expectation to keep in step with the completion target. The patient got a visual representation on the millimeter rule of how small 1mm is, and easily conceptualized attaining the target. Elastic wear motivation became spontaneous based upon a desire to finish on time. Other measurements

Continued on page 2

© 1995 Two Swan Advertising Agency

Accelerated Treatment Results...

Continued from page 1

used as targets were either midline discrepancy, or interproximal space width.

4. In Depth Visits – The written mission and philosophy of the office stated all manipulations necessary to a speedy completion are performed each visit. Visits lasting 30 minutes or more were common, and occasional waiting time was taught to be expected.

5. Hygiene Counseling – Prior to and during the "appliance insertion" phase of treatment, the Tip-Edge patients were seen for several half hour Support Structure Maintenance (SSM) visits. At these SSM sessions patients were introduced to a hygienic, preventive (office and home care) system called "On Target," developed and researched under The American Institute For The Prevention and Eradication of Dental Diseases, Inc. (AIPEDD). Patients were shown how build-up of plaque in the crevice between the tooth and gum results in swollen gums, inflammation and the slowing of orthodontic progress. They were then taught to break up the subgingival plaque colonies at least once in every 24 hours using patented, short handled, "On Target" brushes angled vertically into the subgingival areas; alkalizing, fluoridated dentifrice, natural waxed flossing tape/ribbon which is kinder to the tissues than standard dental floss commonly used, and a variety of interproximal brushes and picks tailored to the individual's interproximal anatomy.

Additional future articles are planned for in depth discussion of finishing technique and SSM methodology. At the Albert Einstein College of Medicine/ Montefiore Medical Center Orthodontic training program, we have begun a structured hygiene counseling program for the orthodontic patients, which is expected to yield some important research data in the not too distant future.

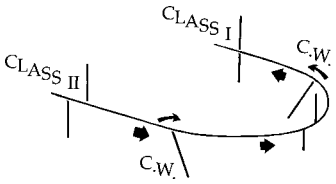
*Shelton CE, Cisneros GJ, Nelson SE, Watkins P. Decreased treatment time due to changes in technique and practice philosophy. Am J Orthod Dentofac Orthop 1994;106:654-657.

Q's and A's

Q. *I am beginning nonextraction treatment of a female (age 14). She has a 50 percent overbite, Class I occlusion on the left side and a Class II on the right. The mandibular dental midline has deviated to the right. The mandibular right canine has a distal crown inclination. Can I place a Side-Winder spring on this canine with the initial .016" archwire to aid midline correction or should I wait until Stage II when the .022" archwire is in place?*

ROOSEVELT PARK, SOUTH AFRICA

A. The application of Side-Winder springs at the beginning of treatment (even though passive) can create mesiodistal couples which interfere with intrusion, thereby delaying anterior bite opening. If the springs are applied with activation, they could deflect the .016" archwires and cause uneven depression of the anterior teeth.



It would be preferable to delay any active management of midlines with Side-Winders until a .022" archwire is in place.

Also when indicated, it is possible to use activated Side-Winders on both sides. That is, on one side you would be moving the crown(s) mesially to help correct the Class II occlusion and on the other moving the crown(s) distally to help support anchorage against Class II elastic pull on the Class I side. In the case referred to above, springs would both (all) be clockwise, see figure.

Q. *I have a nonextraction case with anterior crowding and the mandibular canines are rotated distolingually. Would it be better to use a plain archwire with a coil spring or a vertical looped archwire to gain the necessary space?*

DAYTON, OHIO

A. Since the canines are already rotated distolingually, an anterior coil spring pressing against their brackets would only aggravate their rotations. The best approach would be to use an archwire with five vertical loops (distal to the canines rather than mesial) and stops pressing against the mesial of the mandibular buccal tubes. Rotating springs could then be placed on the canines immediately and the bracket areas between vertical loops tied to lingually displaced teeth. This will result in the most rapid creation of space and alignment of the crowded anterior teeth while simultaneously correcting the rotated canines.

Q. *I understand that Tip-Edge is the ultimate preadjusted appliance. However, it seems at times that buccolingual molar offsets are indicated—is this true?*

SAN DIEGO, CALIFORNIA

A. Molar offsets are usually necessary during Stage II and also during Stage III if .022" round archwires are used. Since the .022" archwires are smaller buccolingually than either the .022" x .028" occlusal tubes or the .036" gingival tubes, a molar offset is required to create/maintain desired molar rotations.

If a .0215" x .028" archwire is used during Stage III, the molar offsets may not be required. However, they will definitely be required in the preceding .022" round archwire to ensure ease of insertion of the full-size rectangular wire.

The need for molar offsets is also related to the size of the premolars—especially second premolars which tend to be small. In that case the molar offsets are necessary to prevent displacing the small, second premolars too far buccally. If small, second premolars are extracted and the larger, first premolars brought into contact with the first molars, molar offsets may not be required.

Q. *I have several patients where the bites are slow in opening. Should I use stronger anchor bends—more than 45 degrees? Or should I use stronger elastics?*

WASHINGTON, NORTH CAROLINA

A. Most patients whose bites do not open quickly (1 to 2 mm per visit) are either not wearing their elastics or clenching their teeth. This, of course, is assuming there has been no damage and the proper amount of bite opening bends and quality/size of archwires are employed.

The *worst* thing to do in situations of slow bite opening would be to use stronger elastics. Intermaxillary elastics should never pull more than 2 or 3 ounces. If the archwires are not deformed, are properly modified so that their anterior portions fall 20 mm +/- gingival to the bracket slots, and the molars are relatively firm or tipped distally, the patient is *definitely* not wearing the elastics. If the molars are mobile, the patient is wearing the elastics intermittently and/or clenching his/her teeth.

The best solution to correct slow bite opening is patient education, motivation and/or intimidation. In some way you must get the patient to realize the importance of wearing the intermaxillary elastics 24 hours a day. If they don't, they should be told the appliances will be removed and they will be dismissed from the practice.

Bracket Positioning Crucial For Final Tip Angulation

Figure 1A. A Side-Winder spring placed to upright maxillary left central incisor.

Figure 1B. At next appointment, no uprighting noted. Bracket improperly placed. A vertical adjustment in the archwire allows further uprighting.

Figure 1C. Uprighting of maxillary left central complete.

Proper placement of Tip-Edge brackets on the teeth, as with other brackets with pre-adjusted archwire slots, is very important. Teeth cannot be properly and automatically uprighted if brackets are placed at improper angulations.

Side-Winder springs were placed on maxillary central incisor brackets with .022" archwires (Figure 1-A). The maxillary left central was tipped distally. Spring was placed on the right central to protect the midline relationships.

At the next appointment, no improvement was noted. Close inspection revealed that the bracket on the maxillary left central was not parallel to the long axis of the crown. To correct the problem, it was not necessary to rebracket the tooth. Simple angular adjustments were placed in the archwire (two vertical bayonet bends) and the Side-Winder springs replaced. The archwire reinserted easily due to the cut-outs of the Tip-Edge archwire slot (Figure 1-B).

The desired result was apparent at the next appointment (Figure 1-C).

CeramaFlex® Tip-Edge brackets are available with special jigs to provide proper placement. Since the bracket slot is very difficult to see, the jig is extended gingivally to better visualize placement parallel to the long axis of the crown (Figure 2).

In order to check for proper bracket placement, a .022" straight section of wire can be placed in the bracket slot and pressed against the uprighting (torquing) surfaces of the bracket slot. The placement of the bracket on the maxillary right central incisor is excellent with the wire paralleling the incisal edge (Figure 3).

The .022" wire is not parallel to the incisal edge on the left central incisor in Figure 4. Upon closer inspection, note that the bracket is somewhat tipped (rotated in a clockwise direction). This method of checking bracket placement accuracy also works well with metal Tip-Edge brackets.

Figure 2. An extended jig helps in accuracy of bracket placement.

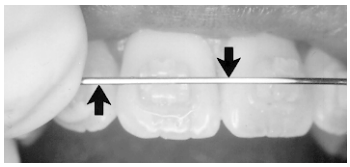


Figure 3. A straight section of .022" wire pressed against uprighting surfaces of bracket shows correct placement on right central.

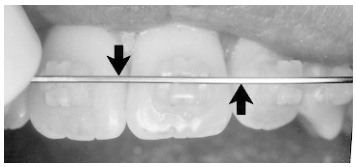
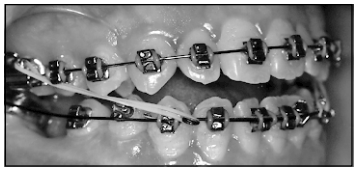


Figure 4. Wire does not parallel incisal edge of left central. Bracket tipped clockwise.

CASE REPORT

Dr. Kenya Ishihara, Osaka, Japan

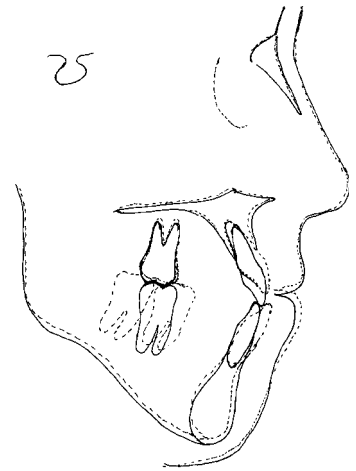
A 15-year old female exhibited a Skeletal Class III open bite malocclusion with -2.5 mm of overbite. (Wits -10mm). The maxillary arch was constricted with a unilateral posterior crossbite. For profile and openbite considerations, the mandibular first molars were extracted.



After expanding the maxillary arch, the mandibular first molars were extracted. Initial archwires of .016" Wilcock wire and mild anchor bends. Light (1.5 oz.) Class III elastics. No extraoral force was used throughout treatment.

Eight months later in Stage III with .022" archwires. Note the bite is closing. Anterior resistance units created with Side-Winder springs. Heavy horizontal forces cause remaining spaces to close "from the back forward."

Near the end of Stage III with .0215" x .028" rectangular arches and crimpable hooks. Final crown tip and torque are achieved by Side-Winder springs. Tip-Edge rings placed after third order movements are complete.



M.S. ..... Female, 15 Years
Class III, Open Bite
Extractions L66
Archwires Used 7 (4U, 3L)
Adjustments ..... 17, **Time**: 22 Months
Retention ..... Maxillary Retainer

Cephalometric Changes:

	Start - Dotted	Finish-Solid
1-APo	+9.0 mm	+5.0mm
Wits	-10.0 mm	-3.5 mm
SN-MP	46.0°	46.0°
ANB	-2.0°	-1.0°
SNA	71.5°	72.0°
SNB	73.5°	73.0°
1-SN	106.0°	100.0°

Tip-Edge Seminar at Sea

TP Orthodontics, Inc., second annual Seminar at Sea was held January 28th through February 4th, 1995. The cruise on the Crown Princess sailed from Fort Lauderdale, Florida and visited the ports of St. Maarten, St. Thomas and Princess Cays. Fifty-four orthodontists and their wives enjoyed five days of lectures and social events. Dr. Richard Parkhouse of Wales presented the Tip-Edge lectures.

America's Cup of Tip-Edge

Caught in a leisure moment, during TP's Second Seminar at Sea, Richard and Rachel take the helm of America's Cup 12 metre racing yacht, "Canada 2." They had just defeated "Stars & Stripes," the actual boat in which Dennis Conner won the America's Cup in Freemantle in 1987.

The event was organized for visitors at St. Maarten, Leeward Islands. During the actual race, Richard explains modestly, the yachts were helmed by professionals. He was allocated the task of starboard backstay grinder, while Rachel performed as a "winch wench."

Tip-Edge Course in Philippines

Two three-day Tip-Edge courses were held in Manila, Philippines. Each course was presented to more than 40 participants by Dr. Richard Parkhouse. The course was sponsored by Fildent Trading Company, TP Orthodontics' exclusive distributor in the Philippines.

Both courses were a great success with much recognition to Dr. Richard Parkhouse for his in depth knowledge of both the straight wire and Tip-Edge techniques. Many course participants were anxious to begin using the Tip-Edge appliance in their private practices. Dr. Robert I. Estaquio, DMD, MSD who was also in attendance at the course and is Professor of Orthodontics at the University in the Philippines, reported that the Tip-Edge technique will soon be included in the University program.

One of two groups that took Tip-Edge courses in Manila, Philippines during February 1995. Dr. Richard Parkhouse of Wales (center, middle row) was the instructor.

For Subscription or Customer Service
Call
1-800-348-8856
219-785-2591
Fax 219-324-3029

100 Center Plaza
LaPorte, Indiana 46350

TIP EDGE TODAY™

Bulk Rate
U.S. Postage
PAID
LaPorte, Ind.
PERMIT NO. 79