

# Orthodontics and adolescence, the keys to a successful therapeutic relationship: a discussion with Olivier REVOL



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## ABSTRACT

*Dr. Olivier REVOL, a pediatric psychiatrist, is the chief of the Neuropsychiatric Service at Pierre-Wertheimer Neurological Hospital of Lyon. In practice for more than twenty years, Dr. Revol has been the director of a reference center for learning disorders for the last seven years. He has written two books<sup>14,15</sup> and many articles devoted to precocious intelligence, hyperactivity, and problems young people have adjusting to school for national and international publications. In his service, Dr. Revol gives hope to many children and their parents every day and fights tirelessly to insure that all students, no matter what level of competence they may have, discover the pleasure of learning in school.*

*Last June, at the invitation of the Association of the Revue d'O.D.F, Dr. Revol presented a captivating all day conference on the topic, "Adolescence, are we making it a disease?" whose proceedings the Revue d'ODF published in full<sup>16</sup>.*

**Philippe Amat, Sophie Carolus.** *Dr. Revol, the relationship between psychiatry and dentofacial orthopedics is one that orthodontists are taking a great deal of interest in as two recent publications in the world's leading orthodontic journal testify<sup>11,12</sup>.*

*In this interview we should like to give you the opportunity to present a synthesis of some of the key elements of this relationship. We have designed some of our questions to help us gain insight on how we can improve the therapeutic interaction between orthodontists and patients. Others will be aimed at providing information for us on certain special topics that come up in our discussions with patients and their parents.*

**Olivier Revol.** *I'll be happy to answer as well as I can.*

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**P.A., S.C.** *In your last book<sup>15</sup> you explained that no matter how difficult it may occasionally be, adolescence remains an essential pathway along which future adults must pass in order to organize their psychological lives. And you added, "There's nothing there to make a disease out of." Nevertheless, our readers can sometimes be disturbed by daily confrontations with out-of-sorts teenagers who are never willing to agree on anything and are overwhelmed by apathy and listlessness. Can you reassure us that this behavior is normal?*

**O.R.** Absolutely. Parents, and adults in general, are frequently disturbed by the irritability, the provocativeness, and the inertia that characterize adolescent comportment.

But these manifestations are not only normal but they are also a most welcome sign of good psychic health showing the young people are breaking free from the parental orbit.

This disengagement is a necessary stage in the passage to adulthood. Adolescents are constrained to adopt a stance of opposition, even if in their heart of hearts they really don't want to, and to behave in ways that make some parents very uncomfortable.

This obligation to break away is universal and affects all families, no matter what the social level or origin of its members may be. It is even more difficult for adolescents whose original relationship with their parents was good, even excellent.

As for chronic asthenia, this apathy is a splendid strategy for eluding or evading more violent verbal or physical confrontations.

In my consultations, I have been able to see how effective this expla-

nation, this making sense of bizarre teenage behavior, is in bringing comfort to troubled families.

**P.A., S.C.** *Your innate sense of modesty may make it difficult for you to hear this, but the audiences at your lectures offer unanimous praise for your professionalism, your profound humanity, and your keen sense of humor. Your young patients especially appreciate these characteristics. Is this interplay one of the reasons you decided to specialize in pediatric, rather than adult or geriatric psychiatry?*

**O.R.** That's an interesting question. In my first book, I wrote that I had originally been attracted to pediatrics. But my resolutely optimistic temperament was quickly dismayed by the harsh reality of having to deal with young patients who suffered from chronic diseases like cystic fibrosis, which, at the time, was inexorably fatal. I wanted to continue treating children but within the framework of a specialty where I would not have to work so often with treatment plans that were incapable of helping desperately ill patients.

So I turned toward psychiatry, but instead of psychiatry devoted to adults where the possibilities of alleviating well-established mental disorders were quite limited, I preferred child psychiatry. In this field, by when symptoms are uncovered promptly and treatment instituted early, the therapy can often be gentle and hardly burdensome for the young patient. By not intervening, the practitioner often risks allowing the symptomology to become fixed with long-term consequences that can be extremely, if not grave, at the very least quite complicated for the child.

"My father just had laser eye surgery, maybe he'll finally be able to see me..."



**P.A., S.C.** *It is interesting to note how closely the diagnostic procedures and therapies of our two specialties resemble each with regard to the early uncovering and, when indicated, management of disorders.*

**O.R.** Exactly. And our patients have everything to gain when we undertake interdisciplinary exchanges between our two specialties.

**P.A., S.C.** *Because parents so frequently accompany their children on appointments to our offices, we sometimes have opportunities to discuss school problems with them. You have brought a message of hope to children, parents, and teachers in affirming your conviction that all children are instinctively passionately interested in education at the outset, even if, in the words of Prévert, "they say 'no' with their heads, they say 'yes' with their hearts." Can you give us some illustrations that would allow us to profit from your experience?*

**O.R.** Three-quarters of the patients who consult me come in because of problems they are having in school. Usually they are elementary or high school boys who don't do their home-

work and spend most of their days, even their nights, glued to their computers.

Their parents condemn the computers complaining, "if my children aren't doing their homework it's because of the computer, but I am convinced that the opposite is true: it's because they haven't been able to do their work that the computer has become their only refuge, and they abuse it.

In contrast to what their behavior seems to show, children in general and adolescents in particular, especially boys, all confide, in the secrecy of the consultation, their fervent wish to be good students. But at some point they find they are not succeeding and the strategy they adopt to mask this passion is to stop doing their schoolwork and to pretend they have no interest in it.

In the beginning, all children are motivated students, but some of them lose that motivation. The best advice we can give their parents is that when they begin to suspect children are losing interest or motivation in school would be that instead of punishing them they should attempt to under-

stand the source of this attitude and try to make sense of the school difficulties.

A large number of my patients with school problems are relieved when I tell them the results of their psychometric tests, of attention and IQ, and explain to them that their difficulties are related to their neurological capabilities. It then becomes easier for us to adapt pedagogic and therapeutic strategies to the individual profile of each patient.

Even though every child is indubitably imbued with the desire to be good a student, not all of them are endowed with the proper equipment for becoming one. And an aggravating factor in France and in many other countries is the failure of school systems to take into account, from a very early age, the individual differences between children and of the

variations in children of personal rhythms and attention spans. For most children, beginning the workday at 8 o'clock in the morning is a little too early. And especially for adolescents, for whom the peak period of melatonin secretion, which controls adjustment to circadian rhythms, is retarded, learning activities should not begin until later in the morning. A certain number of unmotivated children are thus progressively brushed aside and, by the end of the year, have become scholastic failures.

**P.A., S.C.** *How would you define scholastic failure?*

**O.R.** Scholastic failure is leaving school without a diploma or without any qualifications. In France 20% of students at every age level fall into this category. This means that in this country 160,000 children become scholastic failures every year.

## WHAT WE HAVE LEARNED FROM RECENT NEUROSCIENCE RESEARCH

**P.A., S.C.** *Evidence based dentofacial orthopedics<sup>1</sup> recommends that orthodontists base their diagnostic decisions on their experience and the most recent and reliable data furnished by medical research, while at the same time taking into consideration the individual situation and the preferences of each patient. In terms of this principle, we'd like to explore with you what methods recent advances in neuroscience could supply for us to optimize our clinical practices.*

*Let's begin with a study that you hold dear, the Longitudinal Brain Imaging Project of the National Institute of*

Mental Health (the US NIMH) *published in the April 2008 issue of the Journal of Adolescent Health*<sup>7</sup>.

*What are the principles and the results of this longitudinal study and how do the changes taking place in the brains of adolescents influence the cognition, the emotions, and the behavior of our young patients.*

**O.R.** Yes, of course, I think that there are elements in recent neuroscience studies that help us make sense of certain adolescent behavior. And with their help in comprehending that teenagers function not just uniquely in reaction to parents, to adults in general, and to physicians and

orthodontists in particular, we can avoid some of our misunderstandings and some of our inadvisable reactions to provocations from adolescents.

In contrast to what we have thought, adolescence, from a physiological point of view, does not end at the age of 18, but actually much later. The brains of adolescent boys do not fully mature until they are 24 to 25 years old and, perhaps, a little earlier in young women.

All of the intellectual, linguistic, and sensory competencies as well as capacity for abstraction that are necessary for constructing hypotheses based on real evidence are in place in adolescents, putting them on the same level with their parents when they engage them in earnest debate.

But, on the other hand, the prefrontal lobe of the cerebral cortex, that has been described as the brain's brain and which regulates social interactions, makes it possible to abide by rules, and restrains impulsive behavior, is not yet mature.

Accordingly, at a time when the emotions are raging and, in fact, exacerbated by the adolescent onset of hormonal flow, the regulatory system that would prevent teenagers from challenging and, eventually, refusing to accept treatment or obey the rules that make it work, is, unfortunately not yet operating.

The situation can be described with a metaphor: the brain of a teenager is like a Formula One racing car that has all the options installed except one, the braking system.

These recent studies leave us with the understanding that if we estimate that adolescents have fully attained the age of reason because they are

provided with enough intellectual capacities to understand issues, formulate arguments, and succeed in their studies, we must remember that they do not yet possess all the necessary tools because of the incomplete maturation of their prefrontal cortexes. Especially, they don't have the mental flexibility, that is the capacity to change their minds about notions that they suspect are false or slanted. In short, they don't have the full capability of anticipation or of planning ahead.

This explains, moreover, the great difficulty that adolescents, boys in particular, have when faced with any administrative task. Parents cannot comprehend how their teenage children can get good grades in school and yet be completely inept at keeping their accounts balanced, keeping their desks in order, or planning what they are going to do the next week, day, or even hour. The key to this apparent mystery is that their intellectual functioning still needs a few more years of maturation.

Some individuals, especially the hyperactive ones and those with attention deficit disorders, will struggle with these problems and be obliged to find ways to compensate for them for the rest of their lives.

**P.A., S.C.** *E.R. McAnarney<sup>10</sup> has written that new data on brain changes during the development of the child and the adolescent "give us hope that hypotheses can be formed regarding the potential origin of the behavioral problems we observe clinically during those years..." In a recent article G. Barbalat<sup>3</sup> has prepared a review of the aid the neuro-economic approach to the process of the*

*maturation of the neuronal system has given us for an understanding of the physio-pathological basis for the at risk behavior of teenagers.*

*Can you share with us the conclusions Barbalet has come to?*

**O.R.** The recent acquisitions provided by radiological brain imaging have shown the differences between adolescents and adults in cerebral functioning.

With regard to at risk behavior, adolescents have sensations about what can be gained far stronger than their perception of what can be lost and they have great difficulty in imagining what the future would be like.

Strategies for guarding them against risky activities like smoking and drinking will be more effective, accordingly, if they focus on immediate gains rather than long term losses.

So arguments like, "Your skin will lose its glow, your hair and your nails will become brittle, and your breath will stink" impress adolescent smokers far more than warnings of long term consequences like, "If you keep on smoking you will probably develop lung cancer."

**P.A., S.C.** *Risk taking is a relatively natural characteristic for adolescents and they are usually well aware of the risks that their conduct exposes them to<sup>18</sup>. Owing to this, it would appear to be a rather a delicate task to predict adolescent risk behavior, and, in conjunction, to use the new data to increase observation of our young patients. Many approaches have been suggested: interventions with educational goals, coercive methods, motivational and therapeutic interventions*

*for older patients...what do you advise?*

**O.R.** You're right. Adolescents are quite conscious of the risks, and repeating warnings is usually an ineffective tactic, even if we have to do just to retain a coherent posture. On the other hand, new scientific data shows that is useful to draw teenagers' attention to the **immediate** risks of their behavior.

A case in point is the increasingly common "binge drinking" bouts where youngsters drink as much alcohol as possible in a short period of time with the principal objective of getting drunk as quickly as possible. Adolescents are not at all interested in grave warnings about what will happen to their health in ten years if they keep this up. But they will be quite receptive to the argument about the collateral consequences of their at risk behavior, "If you drive your car after having too much to drink and get into an accident that kills someone, it will not matter how successful your pre-medical studies are. You'll never get into medical school with that kind of DUI (driving under the influence of alcohol) charge on your record."

Teenagers respond well to short-term contracts, explained in a way that speaks their language. Three-month objectives are not realistic for them. But a one-week commitment they can understand. For tobacco, appeals to preserving their health fly right over their heads but the prospect of immediate financial gain may be quite attractive, "If you agree to reduce your smoking from 20 to 10 cigarettes a day for a just one week you'll quickly see how much money you are going to save..."

## STRESS AND ORTHODONTICS

**P.A., S.C.** *The management of stress is a constant subject of interest for our two specialties. In dentofacial orthopedics we see the effects stress can cause by provoking patients to take up or aggravate tics, twitches, and other harmful oral habits<sup>2</sup>. Stress can also alter patients' capacity to adapt, thus damaging the integrity of their masticatory apparatus and interfering with the successful completion of orthodontic therapy.*

*Tics, which are generally transitory, can sometimes intensify and be transformed into obsessive-compulsive disorder (OCD), a malady for which the earlier treatment can begin the more effective it will be. You have described the principal clinical elements that allow observers to recognize obsessive-compulsive problems in children at an early stage. What are they?*

**O.R.** Stress, generally speaking, is a factor that must be taken into consideration because it adds another dimension to management of patients and alters our perception of them. By utilizing self-examination tools like the Hospital Anxiety and Depression Scale (HADS) (fig. 1), we can evaluate the severity of the condition and then provide the proper support. This type of questionnaire is particularly useful because timid patients respond more fully to written questions than they do orally in a face-to-face examination.

Tics are involuntary movements that the subject, as a rule, is unaware of. They are differentiated from the behavior in OCD where subjects are quite conscious of compulsive comportment even if they recognize how absurd, ridiculous, and irritating it is.

Tics can develop into obsessive behavior but usually, the two manifestations are different from each other and distinct from anxiety as well, and require specialized management.

When OCD becomes a disturbing element in a child's life in general or for a treatment he or she is undergoing, psychiatric intervention in the form of medication or talking therapy may be indicated. Psychotropic prescriptions are quite effective when OCD reaches a serious and invasive level.

Psychiatrists also use anxiolytic prescriptions to treat tics combined with psychological support to help patients verbalize their problems.

But before reaching that stage, psychiatrists may propose early intervention with use of relaxation techniques, yoga, or sophrology, a controversial method that is said to promote "harmony of consciousness and the values of existence." (Sophrology, which is widely used and respected in France and Switzerland, gained some international recognition when it helped Swiss ski teams to win Olympic gold medals around 2000 but it is still largely unknown in the English speaking world. *Translator's note.*)

These maneuvers may help patients regain some control of their muscular activity and to learn how to relax. The goal is to teach patients to reproduce this relaxation when confronted with stressful situations, answering questions in school, for example, or when family members or friends remind them that they are again producing noticeable tics.

1A	I feel tense or 'wound up':	
	Most of the time	3
	A lot of the time	2
	From time to time, occasionally	1
	Not at all	0
2D	I still enjoy the things I used to enjoy:	
	Definitely as much	0
	Not quite so much	1
	Only a little	2
	Hardly at all	3
3A	I get a sort of frightened feeling as if something awful is about to happen:	
	Very definitely and quite badly	3
	Yes, but not too badly	2
	A little, but it doesn't worry me	1
	Not at all	0
4D	I feel as if I am slowed down:	
	Nearly all the time	3
	Very often	2
	Sometimes	1
	Not at all	0
5A	I get a sort of frightened feeling like 'butterflies' in the stomach:	
	Not at all	0
	Occasionally	1
	Quite Often	2
	Very Often	3
6D	I have lost interest in my appearance:	
	Definitely	3
	I don't take as much care as I should	2
	I may not take quite as much care	1
	I take just as much care as ever	0
7A	I feel restless as I have to be on the move:	
	Very much indeed	3
	Quite a lot	2
8D	I can laugh and see the funny side of things:	
	As much as I always could	0
	Not quite so much now	1
	Definitely not so much now	2
	Not at all	3
9A	Worrying thoughts go through my mind:	
	A great deal of the time	3
	A lot of the time	2
	From time to time, but not too often	1
	Only occasionally	0
10D	I feel cheerful:	
	Not at all	3
	Not often	2
	Sometimes	1
	Most of the time	0
11A	I can sit at ease and feel relaxed:	
	Definitely	0
	Usually	1
	Not Often	2
	Not at all	3
	Not very much	1
	Not at all	0
12D	I look forward with enjoyment to things:	
	As much as I ever did	0
	Rather less than I used to	1
	Definitely less than I used to	2
	Hardly at all	3
13A	I get sudden feelings of panic:	
	Very often indeed	3
	Quite often	2
	Not very often	1
	Not at all	0
14D	I can enjoy a good book or radio or TV program:	
	Often	0
	Sometimes	1
	Not often	2
	Very seldom	3

Scoring (add the As = Anxiety. Add the Ds = Depression). The norms below will give you an idea of the level of Anxiety and Depression.
0-7 = Normal
8-10 = Borderline abnormal
11-21 = Abnormal

Figure 1

HADS – Hospital Anxiety and Depression Scale.

Patients are asked to choose one response from the four given for each interview. They should give an immediate response and be dissuaded from thinking too long about their answers. The questions relating to anxiety are marked "A", and to depression "D". The score for each answer is given in the right column. Instruct the patient to answer how it currently describes their feelings.

A next step might be reliance on alternative medicine with use of herbal medicine or homeopathy. Personally, I have gotten good results by prescribing Euphytose<sup>®</sup>, a plant-based medication.

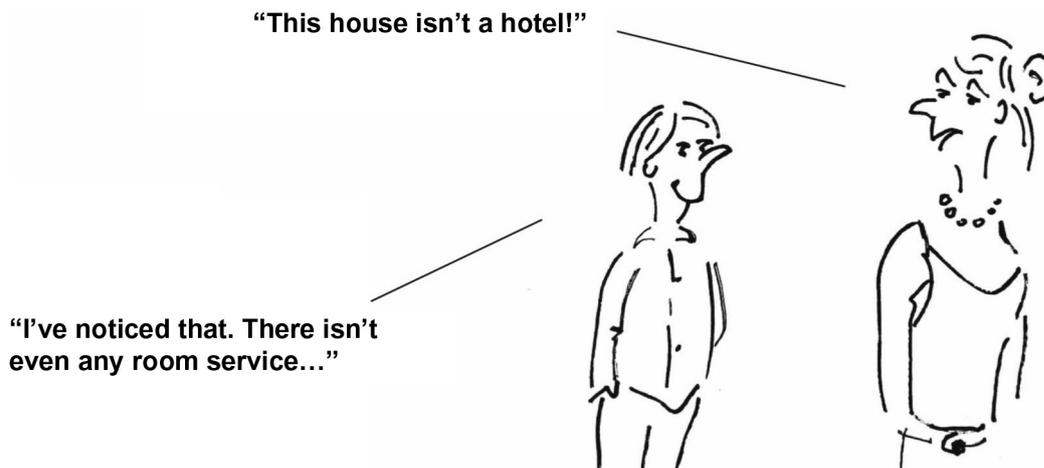
Finally, I have found techniques like hypnosis or Eye Movement Desensitization and Reprocessing (EMDR) to be effective in attenuating stress in children and adolescents.

When I learn in consultation that a child or adolescent is particularly stressed, showing signs of anxiety such as eye-blinking tics, generalized nervousness, phobias or signs of obsessive compulsion, the first question to pose is, "Is this symptom related to the family, to social interaction, or to school problems?" This is a fundamental rule that applies to any symptom children present.

If the child has tics or signs of OCD but is still doing well in school, is not being teased by his friends, and gets along well with his family, a special consultation will be needed.

**P.A., S.C.** You participated in a study<sup>9</sup> designed to construct a special psycho-physiological profile that would elucidate precocious intellectual capability. This work showed that familial stress was present at the time of an infant's birth this could be one of the factors associated with such precocity.

Furthermore, early intellectual development is often accompanied by behavioral problems with inability to deal with stress<sup>13</sup>, making it difficult for intellectually precocious children to interact with their peers and, in some cases, lead to failure in school, with a third of them not going on to high



*school. Can you tell us more about this?*

**O.R.** Precocious intellectual development provokes anxiety in gifted children because it makes them aware of existential notions long before they have the affective emotional maturity to deal with them.

For example, children normally grasp the definitive nature of death when they are six years old, but gifted children understand it at the age of 3 and the thought of it keeps them awake at night.

Intellectually precocious children strive for mastery and control at an extremely early age and possess the ability to project their thoughts into the future. This makes them the most anxious patients, but they are also the most accessible to reasonable explanations. They are capable of comprehending the role they have to play in treatment, particularly in the long term, especially if it is rationally explained to them,

A gifted child has a reasoning system different from those of other youngsters; their thought processes are said to be “flowering.” If they are asked questions, they immediately bring up something else, another image leaps to their mind. At the same time they solicit all the available pathways of their cerebrums, visual, auditory, olfactory, and of memory enabling them to give a full-blown answer that just comes to them without their being able to explain how.

For example, if you ask them, “*Who was Christopher Columbus?*” they won’t parrot the schoolbook answer that a standard pupil with his linear thinking would retrieve. Gifted children, exploiting all the mental pathways that entice them and a mental screen that lights up for them, featuring the film *1492*, hear the music, see a picture of America, a world map, and the answer, in all its implications, springing forth, “*Christopher Columbus, he’s the man who discovered America.*”

This fruitful way of thinking with a cerebrum that stimulates multiple pathways simultaneously interferes, however, with reasoning. These children often have, paradoxically, problems with their school work because from an early age they rely on expansive mode of thinking, this analogical reasoning, by which they arrive at answers immediately but are not able to explain how they got there.

This ends up by posing problems and by putting them into conflict with their teachers.

## SLEEP PROBLEMS DURING ADOLESCENCE

**P.A., S.C.** *When we talk with parents they often tell us that their children find it hard to fall asleep and that when they do, their slumber is often troubled. Sometimes a chronic nasal obstruction is causing these problems. So opening the upper airways frequently becomes a major objective of dentofacial orthopedic therapy<sup>19</sup>.*

*You have pointed out the high level of sleep disorders in young children and described a cognitive behavioral way of managing their problems in falling and staying asleep<sup>4</sup>. What are the principles of your methodology and what strategies do you employ?*

**O.R.** This is an important point and research currently in progress is certainly going to help us to better understand sleep apnea, which is often responsible for causing hyperactivity and school failure in children.

Sleep problems are catastrophic for youngsters and their parents. When children don't sleep well they wear

out their parents to such an extent that they too are stressed and exhausted at bed time and unable to create an atmosphere sufficiently reassuring to encourage youngsters to feel safe and comfortable in bed. The situation feeds on itself and risks changing into something worse like child abuse.

In our article we described a cognitive behavioral way of managing problems in falling and staying asleep. In practice this means we ask parents to place their children under 3 years of age in our care for one night so that we can desensitize them.

When children in this program call out in the middle of the night, one of their caregivers who is not emotionally involved or exhausted as the parent are, explains, with empathy and firmness, that they must go back to sleep and that they have no other choice. In a few nights the children regain normal sleeping patterns and the parents are reassured and rested.

To parents who ask the question, "I don't understand why he doesn't fall asleep?" we explain that all children don't need the same amount of sleep. Some need a lot, some need a little. Some children just cannot fall asleep at 8 o'clock. They need to stay awake until 10 PM, even when they are only 7 or 8 years old.

Parents also need to know that for children to fall asleep at night they must have enjoyed a sufficiently large dose of affection and security during the day.

Neurophysiologists have described the sleep of children as a famous little train that alternates six times during the night between paradoxical sleep and slow sleep always with a one

second waking period between them. When children wake they remember the person who put them to bed. If this person was depressed or had said something sad to the child like, *"happily, I have you, but if I didn't have you. . ."* that naturally upsets the child who calls out, upon waking, to see if that person is all right.

It is important to accompany putting children to sleep, especially if they are anxious, with what I call "a transitional space between waking and sleeping" where the adult sits at the foot of the bed and asks the children to talk about, things that might have bothered them during the day. This gives them a chance to vent their preoccupations so that these worries will not return during the night.

All gifted children go to bed late because they are busy keeping score of the day's events and thinking about

their plans for the next day, evaluating what had not been done and what had been done badly.

With adolescents the melatonin spike comes later, so it is unrealistic to expect a teenager to go to bed before 11 PM or even midnight. It is a physiologically controlled matter so the going to bed process should not be formalized but there are strategies that can help children, especially precocious ones, get to bed earlier.

I often use the metaphor, *"For a Boeing 747 to land safely all the landing lights must be green. If only one remains red, that Boeing cannot land."* It's the same with children. For them to relax and lower their state of vigilance, again especially for the gifted ones, they have to be sure that everything in their surroundings is in order and that they are perfectly safe.

## COMPLIANCE AND DENTOFACIAL ORTHOPEDICS

**P.A., S.C.** *D. L. Sackett<sup>17</sup> was one of the first to integrate the notion of compliance into health care.*

*Compliance is a procedure of active care, well and responsibly thought out, in which patients work to maintain their health in close collaboration with health care professionals<sup>8</sup>. When patients begin to be less compliant, what advice can you give, in conformity to your guidelines, to prevent adding lack of comprehension to the setback?*

**O.R.** It often happens that at some point patients, even those who are gravely ill, who may or may not be aware they are running a grave risk, stop adhering to, treatment require-

ments. This refusal to comply becomes part of the fabric of global rejection of their parents, aggravating the problem because parents play a crucial role in treatment of children.

In such cases, the solution is for the practitioners to make alliances with the children, in meetings where the parents are not present, because it is crucial that the practitioner is assured that the child's refusal to comply is not a consequence of the child's global opposition to anything that comes from their parents.

**P.A., S.C.** *Orthodontists frequently see their patients over a long period of time. Children who have an initial consultation appointment between*

*the ages of 6 to 9 may be 19 or 20 when they have their last appointments for record taking at the end of the retention period. This long term joint therapeutic venture makes orthodontic treatment in some ways resemble the chronology of a chronic disease. Orthodontics complicates the access to autonomy of adolescents just when they are approaching the last stages of the transition between dependence and autonomy in the same way a chronic infection might. What recommendations would you make to a family whose parents want to begin orthodontic treatment for their child when that child clearly asserts that he or she is not sufficiently motivated to accept the major constraints that necessarily accompany orthodontic treatment?*

**O.R.** Here again the practitioner must have a confidential talk alone with the prospective patient to find out if the risk of this particular adolescent becoming non-compliant is really related to the proposed therapy and not a component of a global rejection of the parents. Teenagers must be separated from the family context especially if they have been forced to come in for the consultation against their will because, in conformity with Archimedes's principal, they will resist with the same intensity that their parents deployed to get them to make the consultation visit<sup>16</sup>.

When I perceive this kind of reticence in an initial consultation I take the child or adolescent aside, in a private chat, but I don't immediately ask him or her, "Well, what's the problem, why don't you want to?" Instead I engage the child in a talk about peripheral matters, keeping the

tone light, humorous, and empathetic, later suggesting, "you and your parents don't seem to agree on much of anything. Is that what this is about, or is there something else?" Usually this unblocks the situation and it becomes much easier to gain the child's acceptance of treatment.

It is important that you as a practitioner create a climate of empathy with prospective patients, assure them that you share their interests, because they know they are going to spend a large bloc of time with you and that if you don't get along with each other they will have an excellent reason for not returning to your office.

Practitioners can build up the confidence of their prospective patients by demonstrating that they are not simply tools of their parents and are not interested solely in their teeth but have a real concern for their well being as people. In this way the new patient-orthodontist dyad can build up a therapeutic alliance that will make it easier for the practitioner to explain the advantages and constraints of therapy.

Finally, after having fully explained all aspects of the proposed orthodontic journey, the practitioner can suggest to young patients that they take time to reflect on their decision, saying, "You can come back to see me, just you, alone, and you can tell me what you think about it."

**P.A., S.C.** *A patient's cooperation is the keystone to the archway of successful orthodontic treatment and clinicians can never do too much to optimize the therapeutic relationship they are building up with patients and their families. Orthodontists can meet with parents at any of their children's'*

*appointments or at the six-month re-evaluation sessions. As a child psychiatrist and a father, which type of scheduling do you think is most likely to enhance the therapeutic alliance?*

**O.R.** It is crucial that adolescents and parents hear the same message, because teenagers can be very manipulative. If the orthodontist gives a presentation only to the adolescents, they are fully capable of giving their parents a distorted view of what the orthodontist actually said, reporting, perhaps, "No, he told me I didn't have to wear it every day" or "he told me I didn't have to use them any more"

and the orthodontist will have suffered from an effective con job.

But, on the other hand, if orthodontists make their presentation to the parents alone, adolescent patients will perceive that to be persecution and will be certain that the older generation is trying to hide something from them.

Accordingly, it seems preferable to me for orthodontists to hold regularly scheduled information meetings that parents and patients attend together so everyone will hear the same presentation.

## HOW TO GET ALONG BETTER WITH TEENAGERS

**P.A., S.C.** *What advice can you give practitioners to help them understand adolescents better and what simple techniques can orthodontists use to prevent therapeutic relationships that were cemented when patients were children from deteriorating because of the adolescent crisis?*

**O.R.** I would advise them to adopt a benevolent attitude toward their patients, one infused with empathy, while maintaining a certain distance from them. This empathetic attitude will facilitate treatment and contribute to its success.

Orthodontists can create climates of confidence with their patients by showing sincere interest in their opinions during relaxed dialogues that demonstrate the practitioners care about their patients as people.

Adolescents also appreciate it when they learn something new about

themselves as orthodontists explain their dental condition clearly without crushing them under a barrage of bewildering scientific terms.

The sign of a successful relationship is shown by the orthodontists' understanding what teenagers are talking about, without, somewhat paradoxically, trying to behave as their pal or adopting their vocabulary and style of speech, a smarmy stance that would discredit them.

Practitioners should also reassure their young patients that anything revealed in confidence will never be divulged to other parties. This will make them feel safe in telling their caregivers about their emotional problem and not hide them for fear their parents will be informed.

Orthodontists should also make their young patients understand that they are not necessarily complicit

agents of the parents, without, however, criticizing the educational principles the parents represent. Finally,

it is always absolutely essential that practitioners keep their word.

## HOW TO DEAL WITH PARENT-CHILD CONFLICT DURING TREATMENT

**P.A., S.C.** *Orthodontists are sometimes confronted with the prickly problem posed by adolescent patients whose failure to cooperate complicates treatment or delays it. The prospect of having to wear braces for a longer period of time doesn't seem to faze them very much. This puts the orthodontist in an awkward position with the parents to whom he had promised a certain length of treatment that is now in peril of being extended.*

*Isn't this an illustration of what you have referred to as Archimedes's principle? Isn't the adolescent manifesting his opposition to his parents in choosing, more or less consciously, "to press where it hurts the most?" What advice would you give to orthodontic therapists to help them find a favorable outcome to this situation?*

**O.R.** The best policy to follow is one of triangulation. This removes the problem from the unacceptable stage of parent vs. child by introducing a third party, the orthodontist, the caregiver. To retain their credibility as participants, orthodontists should not give the teenage patients the impression that they are unconditional allies of the parents.

And it is absolutely necessary that they succeed in defusing the parent-adolescent conflict.

They can explain to the parents, "This is no longer a problem between you and your child. It is now a problem

between you, your child, and me, and, especially, between your child and me. So let me explain to him what is at stake." To motivate the adolescent, the orthodontist might use encouraging words like these, "I think you've gotten through the hardest part. You've astonished me by what you've accomplished. I never thought you'd be able to hold on like this. Bravo! It would be a shame to stop now!" or "Do you realize you've worn the elastics for six months already..." I think this type of argument makes a great deal of sense to teenagers.

When I'm having a conference with an adolescent who wants to drop out in the middle of the school year, I frequently use this metaphor, "It would be silly to quit a marathon when you're only a 100 yards from the finish line."

**P.A., S.C.** *We'd like to refer to the advice you gave about another clinical situation that we recently reported. What stance should we adopt during an appointment with an adolescent obviously in conflict with his parents who hadn't said one word during the visit, not even answering questions we had asked, who suddenly rushes out of the office without saying goodbye, slamming the door behind him, and leaving his mother, who had decline our invitation to accompany her child into the operatory, sitting in the waiting room.*

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*What should we say to the mother? What position should we take with the young patient? Should we just ignore the situation or should we talk to her about it and, if so, what attitude do you think we should most appropriately take?*

**O.R.** The problem must be broached with the mother, in a calm and undramatic manner. The incident is not really a crisis and the therapeutic relationship might be pointlessly impaired if the patient's family punishes him for this reason alone.

It is important to remember, and to remind the parents, that adolescents are ambivalent, that they constantly tack back and forth between remaining a child and growing up, alternating between moments when they are charming and conciliatory, and times when they are insupportable.

This means that caregivers, as well as parents, have to surf along with this ambivalence and not be angered by the occasions when teenage behavior is almost impossible to bear.

Adults must combine empathy with firmness and must make it clear to rambunctious adolescents that they are criticizing the behavior not the person.

At the next visit of the patient who had previously stormed out of the office, the orthodontist should bring up the issue immediately in a kindly fashion, saying, perhaps, "*I guess something was really bothering you...if you want to talk about it, I'm ready to listen,*" then firmly, "*...when you walk out of the office slamming the door behind you, that kind of behavior hurts you, certainly doesn't give me any pleasure, and upsets your mother...I'm not here to judge you but I am trying to understand what you did*" and then "*it is absolutely necessary for us to finish your treatment, if we don't, it would look bad for you, literally and figuratively, too.*"

Similarly, it is best not to be stern with patients who missed their previous appointment or to reprimand them, but instead to deal with the issue with empathy and good humor, saying with a smile, "*Ah, I'm really delighted to see you, I was afraid you were never going to come back again...*" When you bring the matter up pleasantly, it gives the teenage patient a chance to resume the dialogue.

Always with humor, certainly without severity, we return once again to my notion of benevolent firmness.

## BEHAVIORAL PROBLEMS AND TEENAGE MENTAL DISORDERS

**P.A., S.C.** *Because of the long term follow ups that complete orthodontic therapy, which may last for as many as 20 years, orthodontists occupy a privileged position in observing, more frequently than other caregivers for children, the psychological as well as the physical development of their*

*patients. Because of this, do you think they can uncover the sometimes-tenuous signs of mental distress that might indicate a child is developing a psychological disorder?*

**O.R.** Detecting the earliest beginnings of behavioral troubles can be

most helpful, because the sooner treatment can commence for them the more effective it will be.

The position of orthodontists as observers of young patients is one that is extremely well placed strategically because patients don't come to them for resolution of their emotional problems so they make no attempt to mask them. In addition, orthodontic appointments give dental specialists an excellent opportunity to talk to patients "from the side," that is to talk to patients when they are sitting next to them, not looking them in the eyes. An orthodontist who talks to patients while examining their radiographs or bending an arch wire, just like a parent who talks to a child while driving a car, watching television, or cooking, seems much less accusatory to adolescents than a face-to-face interrogator who is perceived as infantilizing his listener. Talking from the side is the best way to have conversations with teenagers, one that most effectively encourages them to impart confidences.

**P.A., S.C.** *Even if every suggestive sign doesn't actually indicate that a teenager is depressed, the prevalence of this disorder in the child and adolescent population is as high as 8%. It occurs in adolescents who haven't learned how to employ adaptive strategies. You have described how to recognize depression and how to manage it in terms of its being an important public health problem whose repercussions are serious no matter what the age of the patient may be<sup>5</sup>.*

*What are the principal signs that indicate a depressive episode is beginning and what stance do you suggest*

*orthodontists adopt when confronted with this situation.*

**O.R.** In fact, orthodontists occupy ideal positions as observers, thanks primarily to the frequent opportunities they have to talk to patients "from the side," when they will often hear information patients would never reveal to their psychologists.

Adults often have difficulty in discerning signs of incipient depression in children because they are afraid of re-living the episodes of sadness in their own past and because they like to think of childhood as a period of carefree happiness. It is hard for them to admit that a child can be sad.

The detection of childhood and adolescent depression is a delicate procedure because the signs vary with age. They are different with preteens, adolescents, and adults.

But usually the best indication that an individual is becoming depressed is an abrupt change as we see when happy children lose their joyful attitude or people who have enjoyed leisure activities suddenly abandon them.

My advice to a caregiver who is talking to a possibly depressed person is to approach the problem peripherally, asking, perhaps, "Tell me, what have you been doing this year?"

The patient might answer, "Heck, I was playing soccer but I gave that up."

This type of response should ring an alarm bell for the interviewer. In the follow-up conversation, the interviewer may learn more about the sharp break with former behavior that depicts a portrait of depression that may be transitory but certainly shows something has gone wrong.

Pre-adolescence, or extended childhood, lasts from 6 to 12 years of age.

• **In the pre-adolescent**

The warning signs of depression are:

- self-depreciation (I'm worthless, I don't know anything, I can't, I won't make it, that will be too hard, I won't be able to keep this device very long);
- manifestation of exaggerated behavioral problems that were never displayed before (telling fibs, shoplifting, running away, outbursts of rage);
- starting to have problems with sleep (difficulty in falling asleep, frequent awakenings during the night, very early awakening in the morning) or eating problems (rushes through meals or doesn't eat anything at all).

The caregiver must try to find the cause of these abrupt changes, possibly asking questions like this, *"I get the impression that things aren't going too well for you. I can see you have some worries. What's bothering you*

*the most?"* Pre-adolescents respond favorably to this kind of language and will usually agree to confide in an orthodontist who asks those questions.

• **In the adolescent**

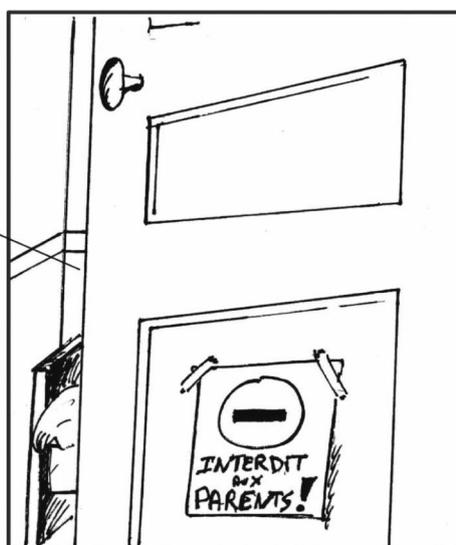
The first signs of depression are:

- excessive irritability, not the usual type of irritation that family members express to each other, but a continuous anger that teenagers take with them wherever they go and that makes them absolutely unbearable with everybody, all the time;
- a loss of interest in leisure activities; even though teenagers may relax their school time activities without being depressed, if they abandon their favorite after school activity that is a definite indication that they are depressed;
- health complaints like headaches or stomachaches for which physicians they consult can find no physical cause.

And if, in addition, this adolescent strongly belittles himself and claims to

**"Tell my parents that my room is MY room...."**

**Parent keep out!**



be totally uninterested in his future and the world he lives in: everything is bad as in Beck's cognitive triad, he is worthless, the world, is unfair, and the future is hopeless. Then there can be no further doubt; he is in major depression.

Then the orthodontist should explain to him that he has these feelings because he is depressed and that his physician can help him by giving him advice and, perhaps, writing a prescription for him. The orthodontist should promptly telephone the physician to explain his concerns about their mutual patient.

The special aspect about depression in children and adolescents is that its consequences multiply. Because they are depressed, adolescents become irritable, they abandon their leisure activities, they become glued to the computer, they seem to hurt everywhere, and the depression feeds on itself as they get more and more irritable and isolated. To break this vicious circle all that is needed is to reverse the tendency and sometimes prescribing anti-depressants for only three weeks or a month will help teenagers to pass through this difficult period and, like a catalyzer, help them to regain their former equilibrium.

**P.A., S.C.** *The earlier anorexia nervosa, or failure to eat adequately, is discovered the better will be the prognosis for its treatment. Its onset is insidious, progressive, and masked. Can you share with us the principal signs whose appearance would make early detection possible? And can you tell us what stance we should adopt when we see them? What age groups are primarily affected? And are there*

*at-risk profiles for teenagers who may become afflicted with this disorder?*

**O.R.** Anorexia nervosa is caused by a panoply of factors, a neuro-biological predisposition that has just been identified on maps of the cerebral cortex, a mental deficit that leads victims to have a faulty concept of their bodily appearance, a context that favors its onset, and a catalyzer that serves as a trigger mechanism.

The suitable context is often a malfunctioning of family relationships with a mother who projects her own needs on her daughter who, in reaction, has difficulty in asserting her independence owing to the blurred boundaries between mother and daughter.

Other predisposing factors may be an otherwise excellent school environment where the demand for good marks may be too stressful, participation in sports programs that might be too risky like classical dance, rhythmic gymnastics, and synchronized swimming all operating in a society that glorifies the cult of good looks.

The final triggering factor is often a trip abroad where the estrangement from the comfort and support of home may provoke an affective distancing and upset normal eating patterns. But the last straw, it may interest you to learn, could be the placement of an orthodontic appliance.

Anorexia nervosa is defined by the appearance of the triad of symptoms, voluntary restriction of food intake, loss of weight, and amenorrhea.

The earlier the diagnosis is made and treatment instituted, the better the prognosis will be. Patients may

not have to be hospitalized if their treatment begins at the first phase of the disease.

Here again, orthodontists have a privileged observation post for noting early signs.

In case of doubt, the orthodontist should discreetly ask the patient's mother if her daughter has recently changed her eating habits, if she is performing triage on her food, or if she is cooking for others. If the answer is yes, and if the patient is an excellent student who is devoted to a demanding physical activity like classical dance, all the signs are in place and it is time to call the physician who will have to find a way to examine the young woman. This physical examination is necessary because adolescents are quite clever and imaginative in hiding their weight loss under several layers of clothing.

The final message I should like to pass on to orthodontists about anor-

exia is the unsettling change in the age of its onset. This disorder that until recently has afflicted mostly females from 12 to 18 years of age, is now more and more occurring in pre-pubertal girls. For them the diagnosis is more difficult, because amenorrhea cannot be a factor, the management is much more complex, and the prognosis is more somber.

**P.A., S.C.** *You wrote in our last issue "There are no well-balanced adolescents, there are only balancing acts." We thank you, Dr. Olivier Revol, for having helped the readers of the Revue d'ODF to install a reassuring safety net in their offices under the sometimes overly taut high wire of the therapeutic relationship with adolescents.*

*For figure 0 "My father just had laser eye surgery, maybe he'll finally be able to see me..."*

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*Philippe Amat made the drawings that illustrate Olivier Revol's "tidbits from consultations."*