

## Separation anxiety: an overview

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Every day throughout the world the same situation takes place. A 15-month-old baby is handed from her mother to a relative or friend to admire and hold. The baby begins to cry for no apparent reason until reunited with her mother. This phenomenon is known as developmental separation anxiety or DSA. In securely attached children, it begins at 10 to 12 months of age and persists until around the age of 24 months old.<sup>1</sup> Both separation anxiety and stranger anxiety appear at around the same time developmentally, as with achievement of object permanence,<sup>2</sup> probably as no coincidence. Children at 2 years of age begin to develop language skills and interact socially with other children, leading to an independence outside of their parents.<sup>3</sup>

Attachment appears to have an important role in the loss of DSA. At 18 months of age, children considered to be securely attached are better able to cope with brief separations from their mothers than children considered to be anxiously attached.<sup>3</sup> The parental factors that contribute to a baby's insecure relationships at 1 year of age are likely to be at work at age 4, and the child's attachment characteristics will continue to reflect the quality of experiences with his parents.<sup>2</sup> The presence of DSA is a universal developmental concept which has an impact on how a child interacts with parents and the world.

### Developmental Separation Anxiety

While separation anxiety would not be considered an age-appropriate behavior for an older child, for 10- to 24-month-old children it is considered a normal part of development. It should be considered a necessary and healthy adaptation a child makes in order to develop emotionally.<sup>4</sup> This period is a child/mother interaction during which the psychic structure is formed.<sup>5</sup> In Freud's theory of development, these children would fit into the oral stage. Erikson's psychosocial theory places many of these children in the stage of trust versus mistrust, which is most likely the main issue with separation anxiety. Piaget's cognitive theory shows these children to be in the sensorimotor stage of cognitive development. These theories help explain the wide range of changes occurring in the child and how behavior that may be appropriate at one point in time is not appropriate at another age.

Professionals who work with children on a daily ba-

sis understand and recognize separation anxiety and try to work within each child's developmental framework. Pediatric anesthesiologists deal with the task of separating young children from their parents in the course of their daily duties. In a 1993 study of children undergoing anesthesia,<sup>6</sup> 2- to 6-year-old children were more likely to exhibit problematic behavior than 7- to 8-year-old children. The three most significant predictors of problematic behavior in a 2- to 6-year-old child were if the child had not taken a preoperative family tour, undergone a previous surgery, and showed preoperatively a dependent or withdrawn disposition.<sup>6</sup> Outpatient pediatric surgery has the advantage of a shortened time of patient separation from the parent, and it is an easier psychological transition for the child, but the parental separation in this experience still causes the most anxiety.<sup>7</sup>

In order to ease the anxiety for both the child and the parent, most children age 5 years or younger are given an anxiolytic/amnesic medication of midazolam orally prior to separation from parents.<sup>8</sup> In many surgical centers, parents are allowed to be present during the anesthesia induction, with some pediatric anesthesiologists claiming that this eliminates the need for premedication.<sup>9</sup> In burn care, professionals have found that having the parent present for hydrotherapy and dressing change in children younger than 3 years of age significantly decreased observable pain responses and expression of anxiety.<sup>10</sup> When a child is acutely ill and/or in a life-threatening situation, separation anxiety can develop in both the parents and the child.<sup>11</sup> A 1996 study by Blesch and Fisher<sup>12</sup> of two groups of parents separated from their children for surgery found that while both groups experienced increased stress during separation from their children, the parents who were present for anesthesia induction and in the PACU (postanesthesia care unit) showed no statistically significant difference in satisfaction than the nonincluded, control parent group. For some medical professions, assessment of a child's separation anxiety and adjusting to fit the child's needs are vital in delivering quality medical care.

While parental presence is used by those claiming it lessens separation anxiety, there is some resistance to parental presence within the medical profession. In a 1990 study by Merritt et al,<sup>13</sup> 18% of pediatricians surveyed said they encouraged parents to leave

when a child undergoes a painful procedure, 24% of those surveyed said they leave it up to the parents, and 58% responded that they encouraged parents to remain. In the same study, 98% of the parents wanted to remain with their child. In a 1991 study of emergency room nurses and doctors, allowance for parental presence depended upon the procedure, with 58% wanting parents present for venipuncture, 66% for laceration repair, and 14% for lumbar puncture. The same study reported that parents, when given the option to stay, would remain with their child 62% of the time.<sup>14</sup> In medicine, some claim a benefit by having parents remain with the child during treatment, but there are also physicians who opt to exclude the parent for one reason or another.

Pediatric dentistry is a field in which separation anxiety is an everyday problem in the younger child. Not only is the child, separated from the parent many times, but she may also need to have uncomfortable procedures with little or no pharmacological intervention. This differs from the medical practice where most uncomfortable procedures are performed under general anesthesia or sedation. Whether or not to allow a parent to accompany a child into the operatory remains a subject of controversy within the pediatric dental community. The American Academy of Pediatric Dentistry's 1996-97 guidelines<sup>15</sup> recognize the wide differences in practitioner philosophy and the wide range of interaction between a child and parent. The guidelines state that the matter of whether a parent is excluded or included should be based on the objectives of gaining the patient's attention and compliance, averting negative or avoidance behaviors, and establishing authority. Parental presence in the operatory does not appear to increase disruptive behavior in children and possibly may increase cooperative behavior. However, this is dependent on the parent's interaction with the child, because anxious or agitated parents may be a negative influence.<sup>16</sup>

Historically, dentistry has favored excluding parents during treatment. This trend may be changing toward more parental participation. In a 1972 survey of 120 diplomates of the Association of Pedodontic Diplomates, 5(4%) of the respondents said they always allowed the parent to be with the child, 97(81%) of the respondents said they allowed the parent to be with the child in selected cases, and 18(15%) of the respondents said they never allowed the parent to be present with the child during operative treatment.<sup>17</sup> In a 1979 survey of 34 members of the Washington State Academy of Pediatric Dentists, Levy and Domoto found that 88% of the respondents allowed parents in the operatory during the child's appointment.<sup>18</sup> A 1981 survey of the members of the American Academy of Pedodontics found that 84% of the diplomates and 80% of the members would allow parents in the operatory in selected cases with the majority of the selected cases involving 0- to 3-year-old children.<sup>19</sup> Cipes and Miraglia,<sup>20</sup> in a 1985 survey of 60 pediatric dentists in the state of Connecticut, found that

71% would allow parental presence during the examination of 3- to 5-year-old children, while 55% would generally allow parental presence during the same-aged child's treatment visits. In a 1989 survey by Nathan<sup>21</sup> of 616 diplomates and nondiplomates, he found that 60% of respondents allowed parental presence during examinations and 49% agreed somewhat to allow parental presence during restorative treatment. Most recently, Marcum, Turner, and Courts,<sup>22</sup> in a 1995 survey of 90 practicing Florida pediatric dentists, found that 90% would allow parents for new patient exams with children younger than 4 years of age and 40% would never allow parents for restorative procedures with children younger than 4. These studies point to a general trend of increased parental participation with pediatric dentists, but whether the cause of this trend is increased awareness of DSA, societal pressures, or decreased use of aversive techniques is unknown.<sup>23</sup>

Parental presence and child behavior in dentistry has been studied for some time. Lewis and Law,<sup>24</sup> in a 1958 study of 18 children ages 5-and-a-half to 7 years old, found no statistically significant differences in the psychophysiologic reactions to the presence or absence of parents during oral prophylaxis. In the classic 1962 study, Frankel, Shiere, and Fogels<sup>25</sup> found that separated children between 41 and 49 months who were undergoing dental treatment had more negative behavior than their unseparated counterparts, while those older than age 4 displayed no significant differences in behavior whether separated or unseparated.

In a 1978 study, Venham, Bengston, and Cipes<sup>26</sup> found no significant differences relating to the parent's presence or absence on the child's response measures with dental patients who were of the average age of 4 years. The parents and patients were given the choice of parental presence or absence, with 86% choosing parental presence at the examination visit, 82% at the first treatment visit, 66% at the second treatment visit, 70% at the third treatment visit, 56% at the fourth treatment visit, and 45% at the polish visit. Pfeifferle et al., in a study of 100 3- to 5-year-old, North Carolina preschool children, found that there was no significant difference in behavior between children treated with their parents present or absent.<sup>27</sup> In a 1991 study of 516 Hispanic children, average age 7.7 years, 30% of 3 to 4 year olds proved unmanageable by standard nonpharmacologic behavior management techniques for dental treatment, and only one of the parents chose to accompany their child.<sup>28</sup> A 1993 study of 273 Swedish 3 year olds with their parents present for the dental examination found that 13% showed reluctant acceptance and 11% reacted negatively. In this same study, 85% of the children who refused or reacted negatively/reluctantly did not sit alone in the dental chair, a factor which was found to be a valuable predictor of patient behavior.<sup>29</sup>

Recently, a 1993 study of 32 British pediatric dental patients, average age 8 years, 3 months, showed that

separating children and mothers increased the frequency of negative behavior, particularly in the 4- to 8-year-old group.<sup>30</sup> These studies may point to the crucial interplay between developmental separation anxiety, the patient's age, the presence of the attachment figure, and the patient's behavior.

This issue is further complicated by the fact that parents also have an opinion about whether they should accompany their child during the dental visit. In a 1992 survey of 79 parents by Kamp,<sup>31</sup> 66% of the parents wanted to be with their child during dental care. Of the 66%, 85% responded that they themselves would feel better and 92% said they believed their child would feel better. A study of 100 parents accompanying their children for dental treatment found that 75% of the parents surveyed wanted to always be with their child while 90% said that they would be willing to leave the room if asked. In the same study, the mean age at which the parents thought the child could be unaccompanied for dental treatment was 8.2 years.<sup>32</sup> In the British study mentioned previously, 53% of the parents wished to be present on all occasions while 47% wished to be present on some occasions.<sup>30</sup> Regardless of the position a dentist takes, the policy should be explained to the parent prior to treatment with the benefits and risks of the position explained.<sup>33</sup>

## Separation Anxiety Disorder

Most children have stopped the normal developmental stage of separation anxiety by age 2. If separation anxiety continues past this age and begins to interfere with the child's functioning, then it becomes known as separation anxiety disorder or SAD.<sup>34</sup> Not until 1980 was separation anxiety disorder of childhood and adolescence clinically described.<sup>11</sup> The criteria for diagnosing SAD are excessive anxiety, separation, and a figure to whom the child is attached.<sup>34</sup> Key features include, but are not limited to, fretting about possible harm coming to the attachment figure, worry about past events, refusing to go to school, and fear of going to sleep without parents.<sup>34</sup> Care should be made not to confuse this disorder with DSA because this well-known developmental stage is transitory and can continue into the early preschool years.<sup>11</sup>

One of the first areas to suffer in a child's functioning, when SAD is present, is school attendance. In a study comparing children with separation anxiety and school phobia, those with separation anxiety were more likely to meet DSM-III criteria for an additional diagnosis, less likely to exhibit school refusal, to be female, prepubertal, from families with lower socioeconomic backgrounds, and have mothers with a higher rate of affective disorders.<sup>35</sup> For mild cases of school refusal, the primary care physician can recommend the child be sent to school unless there are objective signs or symptoms of illness.<sup>36</sup> For more severe cases, the parent may need to remain with the child initially and then on subsequent days, pull away farther from the child until the child can be left alone.<sup>34</sup> In

treatment, the parents and the school are, of course, considered the critical players in the nonpharmacological treatment of school refusal secondary to separation anxiety disorder. In diagnosing the etiology of school refusal, it is important to differentiate separation anxiety from school phobia, which consists of a fear from a specific source (i.e., bully, mean teacher, etc.).<sup>37</sup>

Adult psychological disorders may initially begin as separation anxiety disorder of childhood. In a 1993 study,<sup>38</sup> it was suggested that early separation anxiety disorder may be the forerunner of adult anxiety and make the risk higher for panic disorder in the most severely affected children. In another study by the same authors, women with a lifetime history of panic disorder/agoraphobia had higher scores of retrospectively measured early separation anxiety than the subjects with either generalized anxiety or other phobic disorders.<sup>39</sup>

Another study, focusing on dreams of panic-disorder and comparison patients, showed that the panic-disorder patients had a higher separation anxiety score on both the dreams and screen memories than comparison patients.<sup>40</sup>

In a study of 252 outpatients at an anxiety disorder research clinic, the prevalence of childhood separation anxiety disorder was higher among patients with two or more lifetime adult anxiety disorder diagnoses than among patients with only one anxiety disorder diagnosis.<sup>41</sup> A study of late-adolescent women with eating disorders found they had higher levels of maternal overprotectiveness during childhood, higher levels of separation anxiety, and lower healthy separation scores than the control subjects.<sup>42</sup> Separation anxiety disorder has also been linked with mitral valve prolapse and as many as 40% of agoraphobics with panic attacks may have a mitral valve prolapse.<sup>34</sup> Although many studies point toward associations between adult psychopathy and childhood separation anxiety disorder, a majority of the studies are retrospective and do not support a longitudinal association.

A clinician must differentiate between the emotionally delayed child with continued separation anxiety and the child with early onset SAD. The two can be differentiated by the later age of onset, its persistence throughout childhood, and its general impact.<sup>42</sup> The normal DSA usually resolves without any specific intervention or treatment, while the early separation anxiety disorder will usually not resolve without some kind of intervention or treatment. Dental practitioners should not confuse simple dental phobia or anxiety with SAD. Those children with moderate to severe separation disorder warrant a referral to a child psychiatrist or child psychologist. The Separation Anxiety Symptom Inventory (SASI) can be used to measure the level of separation anxiety.<sup>43</sup> Treatment of separation anxiety disorder may consist of nonpharmacological and/or pharmacologic means. Psychotherapy and behavior modification should always be the first line of action. Play therapy can be used as a means for nonpharmacological treatment of SAD.<sup>44</sup>

## Clinical Implications

There has been an increase in parental participation in pediatric dental practice. This may be conducive to dental treatment of young children (3 years and younger) with the consideration of DSA and the child's emotional need for parental presence. Parental presence demanded by the patient beyond this age may be a sign of an underlying disturbance such as SAD or dental phobia. Any time a clinician suspects SAD in a patient, a referral to a child psychiatrist or child psychologist for evaluation may be warranted.

Regardless of age, parental presence in the dental operatory is something pediatric dental patients and especially patients' parents will be demanding in the future.<sup>45</sup> There is a wide range of patient response to parental presence during dental treatment depending on many factors including attachment type, individual coping style, and individual parenting style. As a rule, the younger the child, the higher the distress that will be as-

### APPENDIX 1. STARKY'S REASONS FOR CHILD/PARENT SEPARATION<sup>48</sup>

1. The parent often repeats orders, creating an annoyance for both the dentist and the pediatric patient.
2. The parent injects orders, becoming a barrier to development of rapport between the dentist and child.
3. The dentist is unable to use voice intonation in the presence of the parent because he or she may be offended.
4. The child divides the attention between the parent and the dentist.
5. The dentist divides the attention between the parent and the child.

### APPENDIX 2. THE DSM-IV DIAGNOSTIC CRITERIA TO CLASSIFY AN INDIVIDUAL IN THE SEPARATION ANXIETY DISORDER CATEGORY (DIAGNOSTIC CODE 309.21)<sup>49</sup>

- A. Developmentally inappropriate and excessive anxiety concerning separation from home or from those to whom the individual is attached, as evidenced by 3 (or more) of the following:
  1. Recurrent excessive distress when separation from home or major attachment figures occurs or is anticipated.
  2. Persistent and excessive worry about losing, or about possible harm befalling, major attachment figures.
  3. Persistent and excessive worry that an untoward event will lead to separation from a major attachment figure (e.g., getting lost or being kidnapped).
  4. Persistent reluctance or refusal to go to school or elsewhere because of fear of separation.
  5. Persistently and excessively fearful or reluctant to be alone or without major attachment figures at home or without significant adults in other settings.
  6. Persistent reluctance or refusal to go to sleep without being near a major attachment figure or to sleep away from home.
  7. Repeated nightmares involving the theme of separation.
  8. Repeated complaints of physical symptoms (such as headaches, stomachaches, nausea, or vomiting) when separation from major attachment figures occurs or is anticipated.
- B. The duration of the disturbance is at least four weeks.
- C. The onset is before age 18 years.
- D. The disturbance causes clinically significant distress or impairment in social, academic (occupational), or other important areas of functioning.
- E. The disturbance does not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and, in adolescents and adults, is not better accounted for by Panic Disorder with Agoraphobia.

sociated with separation from the parent.<sup>46</sup> Including the parent in the treatment process may also be a way to avoid litigation through prevention of misinterpretation and/or fabrication. A clinician is faced with deciding to either exclude parents routinely, allow parents to decide for themselves whether to be present or absent, or exclude most parents, with the exception of parents of the very young child or the patient with developmental disabilities.<sup>47</sup> As with any technique or procedure, the parents of the patient should be informed of the office policy and the risks and benefits of the policy.

## Conclusions

Both normal developmental separation anxiety and separation anxiety disorder have an impact on those who work with children. Recognition and differentiation between the two are vitally important to the overall well-being of the child. The literature supports the presence of parents in the dental operatory for children 3 years of age or younger due to the developmental process known as separation anxiety. Many health professions have adjusted their practice policies and techniques to accommodate the normal reactions of separation anxiety. Early recognition and treatment of separation anxiety disorder are the keys to success in the long-term development of the affected individual. This disorder is multifactorial with a close association with the child/parent or child/attachment figure interaction. Future research in both of these areas may lead to a decrease in the morbidity of SAD and decrease stress to both a child patient and the parent of a child with DSA. An informed parent is the best ally in providing treatment to the patient in an environment that adheres to office policy, and may also help avoid litigation.

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