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Instructions for Parents

ADENOIDECTOMY & TONSILLECTOMY

The following instructions have been created to assist you in the care of your child after adenoidectomy and/or tonsillectomy. *They are presented for your review during the two week recovery period and until you return for your child's first postoperative follow-up visit. Please understand that every child is unique and that these instructions are offered as guidelines. Every child will handle each situation differently and every parent is similarly entitled to respond uniquely to their child's needs during the recovery and postoperative period of time.* ***Please provide these instructions to any other adult who will be caring for your child while they are still recovering from surgery.***

A great deal of detail has been placed in these instructions. Read them as often as you need to. Please refer to the index on page one to locate each particular section. Your questions and concerns are important to us. ***During the first few weeks after surgery, we encourage you to contact our office or on-call physician should significant medical/surgical issues arise****.*

Thank you.

Background:

***What is their function?* – Tonsils and Adenoids** are lymph glands in the back and top of the throat. They help the body filter infectious material. In children, they can become especially active and may, therefore, grow in size or even remain a source for continued infections for many years. When enlarged they may obstruct a significant portion of your child's airway.

Where are they located? – The **adenoids** grow at the very top of the throat (nasopharynx), above the roof-of-mouth (palate) and behind the back exit of the nose. The **tonsils** can be seen through the mouth (oral cavity) on each side and extend into the mid part of the throat (oropharynx) where the tongue curves into lower part of the throat (hypopharynx).

Why are they taken out? – The **adenoids** are surgically removed typically for:
1) significant obstructed breathing, 2) in association with the placement of "ear tubes," or 3) in children who have a long-term history of "chronic sinusitis." The **tonsils** are surgically removed typically for: 1) significant obstructed breathing or 2) significant recurrent tonsil infections (chronic tonsillitis).

When are they removed? – The adenoids usually become obstructive in size earlier in childhood than the tonsils, so it is not uncommon to have just the adenoids removed in some, usually younger, children. While there are no strict age limitations, **adenoids** usually do not become a significant problem in children less than one year of age and large **tonsils** usually do not become a significant problem in children less than two-and-a-half years of age.

What is the long-term effect of surgery? – Many parents wonder if removing the tonsils and adenoids can harm their child by reducing their ability to fight infections. The tonsils and adenoids are just the largest collection of lymph glands in and around the throat. There is a fairly substantial collection of "tonsil tissue" at the base of the tongue, deep in the lower throat, and there are small clusters and groups of "tonsil tissue" surrounding every minor salivary gland in the mouth. Your child's body, therefore, has a healthy excess amount of "tonsil tissue" so you need not worry about their future ability to fight off throat infections after adenoidectomy or tonsillectomy.

Hospital Course:

The throat has to heal in several stages regardless of whether your child has had an adenoidectomy or tonsillectomy. Although general anesthesia for both procedures is the same, **it is usually an easier recovery when just the adenoids are removed** because of their location above, and protected by, the palate (*see "Background" above*)**.** Nonetheless, whether your child underwent an adenoidectomy or tonsillectomy, s/he will need time to allow for recovery from anesthesia and for the natural wound healing processes to occur.

STAGE 1: Following surgery, your child will go from the Operating Room to the Post Anesthesia Care Unit (aka: "the Recovery Room") for the first stage of recovery. There, s/he will be under continuous nursing care and monitoring until the early effects of general anesthesia wear off and spontaneous breathing returns. Getting through this stage usually takes about 15-30 minutes.

STAGE 2: As your child comes out from under general anesthesia, s/he will regain consciousness and begin to voluntarily cough as well as follow simple commands ("open your eyes"). Once in this second stage of recovery, your child will be transferred to the Pediatric Post-Surgical Area where s/he will be repeatedly evaluated by readily available nursing care. There, you and your child can stay together until this stage of recovery is completed. **Remember, when your child is first brought to you, s/he is still relatively early in the recovery process so be prepared for the possibility that s/he may be disoriented or may even appear physically upset. They may dislike being attached to monitors or to the intravenous fluid line.** Comfort them, assist them in relaxing (be relaxed yourself) and they will settle down and probably go in and out of sleep over the next two hours-or-so.

General Recovery Information:

STAGE 3: Most children do well the day of surgery and, usually, for the next 24 hours, probably due to the combination of the intraoperative medications given and the natural adrenalin response to the physiological stress of an operation. Perhaps somewhat surprisingly, therefore, **the "worst days" for recovery are usually 2-5 days after surgery.** Stay with the postoperative protocols and once you get past that "clinical hurdle," you will most likely see your child progress steadily day by day. Until that time, it is recommended to have an adult available to closely supervise and monitor your child because of the potential for ongoing pain and dehydration from poor food and/or drink intake.

Return to normal activities with normal energy levels may take the full two weeks or more, but your child will most likely be able to rejoin his/her peer group setting after about one week. Plan ahead and contact your child's teacher(s) for upcoming assignments, preparing to "home-school" until they are ready to go back on their own. It would be unreasonable to expect the school nurse to monitor your child's fluid intake every hour or to administer medications repeatedly throughout the day. It usually takes about one week for parents to feel comfortable that their child will *not* need the school nurse more than once during school hours.

Wound Healing:

Usually, no surgical sutures ("stitches") are required when removing tonsil tissue. This means that **the region(s) where the adenoids and tonsils were removed heal by what is called *secondary intention*, from the edges inward.** First, a soft, yellow-white mucous crust (scab) forms over 48-72 hours. This layer matures and a new protective layer of mucosa (inner skin) grows under the crust and over the raw surface, sealing the surgical site. This process usually takes between one to two weeks for complete healing. On a rare occasion, where the adenoids and tonsils were removed, fresh exuberant granulation scar tissue growth prevents completion of the remucosalization process and an obstructing granulation polyp may develop requiring additional medication or, sometimes, surgical removal.

Bleeding:

Bleeding can be a serious complication of tonsillectomy and adenoidectomy and may occur in the first few hours after surgery or, more commonly, at 7-10 days later when the soft mucous crusts come off the healing areas. However, *excessive and prolonged bleeding is not expected,* occurring, on average, in less than 1 in every 100 patients. **If bleeding does occur, you should report this immediately to our office or on-call physician** at (904) 262-7368.
If necessary, call 911 or take your child to the nearest Emergency Room.

Bloody "spotting" may occur in the first several days after surgery and results from a few drops of blood mixing with saliva as the soft mucous crust matures. **Bleeding and bloody vomiting may occur towards the beginning of the second week of recovery** and typically results from dehydration and drying of the mucous crust(s) which then do not gradually dissolve away but come off in larger clumps exposing vulnerable, incompletely healed raw surfaces.

If you should see fresh red blood dripping out of the nose or coating the top of the tongue that does not stop and clear within five to ten minutes (the body's normal clotting time), or if there is repeated bloody vomiting, this may represent significant bleeding. *Repeated rinsing and spitting very cold water (ice chips in water) over 15-30 minutes can help clear out the throat and stop minor bleeding.* **Usually, delayed postoperative bleeding is minor and resolves spontaneously *or* can be assessed and controlled in the Emergency Room.** On occasion, your child may need to be admitted to the Hospital for intravenous hydration or possibly taken to the operating room for control of bleeding.

Nausea & Vomiting:

One or two episodes of nausea, with or without vomiting, are not unusual after "T & A" surgery and are often a side-effect of the general anesthesia that needs to fully wear off. Nausea may also occur if any blood is swallowed. On occasion, some children experience nausea and vomiting over several days. Excessive vomiting is unusual and should be reported. You will most likely have a prescription for promethazine (Phenergan) to help control postoperative nausea or vomiting.

Throat Pain:

Pain occurs after tonsil and adenoid surgery to varying degrees depending on the individual child**. Sharp, stinging pain is common in the first several days** as the underlying tissue, which includes sensory nerve fibers, is exposed. As the mucous scab (soft healing crust) forms, this pain becomes more of a "dull, internal muscle ache" which gradually fades away in approximately 7-10 more days.

The tissue beneath the tonsils and adenoids is typically not closed with stitches after surgery, resulting in an open sore, similar to an ulcer. This means that healing has to occur by gradual regrowth of mucosa, the inner skin lining. This is called *remucosalization.* Until this process is complete, your child will have a "healing ulcer". Pain management recommendations are based on the understanding of these healing principles.

Managing Throat Pain:

Pain spikes can occur episodically throughout the day and night for at least one week, sometimes longer on occasion. **The key to throat pain management is to try and preemptively reduce or keep as much of the pain signals away from the brain as possible during the healing period.** *It is easier keeping pain sensation under manageable control rather than trying to get rid of pain when it returns. Once significant pain develops, it often takes more medication to bring it back under reasonable control. Further, your child will then expect pain to be just as severe each time a new pain spike occurs.*

On the day of surgery, your child may initially receive acetaminophen, usually in the form of preoperative medication. While under anesthesia, your child will also most likely receive a narcotic medication. This combined level of pain control typically wears off by one to two hours after surgery. **After leaving the Post-Anesthesia Care Unit (PACU = "recovery room"), remember your child will most likely be transferred to the Pediatric Post-Surgical Area for the remainder of their recovery time. Here is where ongoing oral, and possibly intravenous, pain medication is given and <u>this is when your child begins his/her post-surgery "around-the-clock" dosing of oral pain medication.</u>**

TIP: With tonsillectomies, many children also gain a degree of pain relief over the first few days from placing ice packs under the chin, which the post anesthesia care nurses may provide you with early on.

POST-OP DAYS #1-5:

For pain relief during the first half-week after surgery, the currently recommended medication protocol is to *alternate* the prescription acetaminophen-with-hydrocodone (Hycet, Lortab) *every three hours* with ibuprofen (Motrin, Advil, etc) *for up to the first 5 days after surgery*. This means that your child will receive 4 doses per day *each* of prescription acetaminophen-with-hydrocodone and ibuprofen every 24 hours.

PLEASE REFER TO APPENDIX A FOR A PICTURE CHART TO HELP YOU KEEP TRACK OF MEDICATION DOSING

TIP: Consider setting a timer or an alarm clock every three hours in order to get up and give medication at the scheduled time even if it means briefly awakening your child.

During this first part of the recovery process, it is your decision whether to use non-narcotic "plain" acetaminophen (Tylenol, Panadol, Tempra, etc.) instead of the Hycet prescription medication. Although the oral liquid, chewable or dissolvable forms of acetaminophen are usually preferred, a rectal suppository of non-narcotic acetaminophen is available for those children who aren't swallowing very well.

Most parents begin using the "fortified" narcotic formulation over the first five days and begin gradually weaning off of the narcotic dosing towards the end of the first postoperative week.

TIP: You may wish to keep the acetaminophen with codeine/hydrocodone elixir in your refrigerator to decrease the potential for stinging upon swallowing, especially if the formulation has a small percentage of alcohol mixed in.

***** Remember: always use the recommended pediatric dose for your child's weight and age *****

AFTER POST-OP DAY #5:

For pain relief after post-op Day #5, continue "around-the-clock" pain medication dosing, if needed, but *ONLY* with plain acetaminophen or acetaminophen-with Hydrocodone (Hycet, Lortab) … and no more than one dose every five -to- six hours.

** Call the office if you would like a refill of the prescription medication**

Please make sure your local pharmacy has it in stock

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IT IS VERY IMPORTANT TO DISCONTINUE THE IBUPROFEN (MOTRIN, ADVIL) AT THIS TIME TO AVOID THE POTENTIAL FOR BLEEDING ISSUES LATER IN THE RECOVERY PROCESS (see general pain medication information below)**.**

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In order to minimize the duration your child is on narcotic medications, try to begin preferentially using only the (non-narcotic) acetaminophen if effective at this time. *When you feel comfortable to begin gradually tapering the pain medication schedule from "around-the-clock" dosing, usually towards the end of the first week, consider using the acetaminophen-with-narcotic at bedtime, early in the morning when s/he wakes up, and/or approximately 30 minutes before meals to help ease the pain with eating, as a starting point.* You will probably need to continue the pain medication taper for at least several more days and on an "as needed" basis until your child is fully recovered. **Response is variable but most children will no longer need pain medication for throat pain within 10-14 days.**

GENERAL PAIN MEDICATION INFORMATION: ***You should NOT give aspirin for pain as it can promote bleeding by inhibiting natural clotting factors. Aspirin-like non-steroidal anti-inflammatory medications (such as Motrin, Advil, Nuprin, Ibuprofen, etc.) are a different class of drug but should only be used as directed because excessive dosing over a prolonged period of time may also result in delayed clotting with prolonged bleeding concerns similar to aspirin use.***

Acetaminophen-with-hydrocodone and other narcotics are usually prescribed for all but the youngest children. These narcotic medications should NOT be used "around-the-clock" for an excessively prolonged period of time without medical supervision. Please follow the instructions that were given for around the clock dosing.

HYCET IS THE ONLY BRAND OF ACETAMINOPHEN-WITH-HYDROCODONE SPECIFICALLY FORMULATED SO THAT YOU CAN SAFELY GIVE IT TO YOUR CHILD EVERY 4 HOURS. IT CAN BE SAFELY GIVEN AS PRESCRIBED without receiving too much total acetaminophen over a 24 hour period.

Other brands of acetaminophen with hydrocodone, such as Lortab elixir, have a higher concentration of acetaminophen per dose and cannot be safely used every four hours beyond 2-3 doses, on average.

Fever:

A low-grade fever after surgery is not unusual. It is often a non-infectious response to the lungs not fully re-expanding completely after general anesthesia. *Deep breathing and adequate hydration* helps reverse early postoperative fever spikes in most children. When your child is awake, consider deep breathing exercises at the top of every hour: a) breathe deeply through the nose; b) hold the breath for several counts; c) then slowly exhale through the mouth. Repeat several times.

You should take your child's temperature with a thermometer if you think it is high. An oral temperature below 101.5 degrees F is acceptable during the first 3 days of the postoperative period. On occasion, some children are, unfortunately, incubating a respiratory or GI ("gut") virus at the time of surgery and it is in the recovery period that symptoms begin to develop and become recognized. While uncommon, some children may develop a true middle ear infection after surgery, with fever being an early symptom.

To help reduce the chance of fever, maintain deep breathing exercises and adequate hydration along with the recommended pain medication schedule (acetaminophen and ibuprofen are also fever reducers). Contact our office if your child does not improve or if they have an oral temperature greater than 101.5 degrees F beyond 3 days after surgery. On occasion, we may ask you to bring your child to our office or recommend that you see your primary care physician if a non-ENT cause for the fever is suspected.

Ear Pain:

Ear pain is common after T&A surgery**. It often begins to occur in the 3 to 5 day period postoperatively.** In the absence of fever or discharge from the ear, or with ear pain only on one side**, it is usually "referred pain" from the common sensory nerves** that come from both the ear as well as the healing areas exposed during surgery. It is often described as a sharp, "burning sensation." It usually means that the tonsil areas are beginning to heal and the brain is trying to figure out why there are different patterns of impulses coming from that region of the body, analogous to "phantom limb pain" often experienced early on by amputees. **Resolution of referred ear pain complaints usually occur within two or three weeks following surgery. Please contact our office if prolonged ear pain occurs.**

TIP: If the ear pain is not relieved by the medications that are already being administered then you may try a warm compress such as a warm wash cloth to the ear to help relieve pain. Your child may also benefit from drinking "room temperature" liquids; liquids that are too cold or hot may worsen the pain.

Neck Pain:

Many children develop a stiff neck or neck pain following tonsil and adenoid surgery. It is typically due to spasm or overuse of the long heavier muscles in the back of the neck to compensate for the sore, thinner muscles along the front of the spinal column behind where the adenoids were removed. It is felt to be the result of a combination of several factors including the positioning for the procedure, reduced neck movement after surgery, the technique used to stop bleeding at the top of the throat from a thorough adenoidectomy, and generalized postoperative dehydration.

To reduce the chance of neck pain or neck stiffness from occurring and progressing: maintain hydration, continue the recommended pain medication dosing schedule, apply warm compresses (or a hot wash cloth) to the back of the neck, firmly massage the back of neck muscles from the bottom of the skull to the top of the shoulders, assure compliance with slow but gradually increasing neck turning ("range-of-motion") exercises, and continue to monitor for increasing general activity levels until fully recovered. Application of penetrating creams may also be helpful. Resolution of neck discomfort complaints usually occurs within two weeks following surgery. **Please contact our office if severe or prolonged neck pain is noted.**

Hydration / Dehydration:

Keeping the mouth moist is very important during the healing process**. To avoid progressive dehydration difficulties, your child should be strongly encouraged to sip fluids increasingly over the first 24-48 hours in order to reach and maintain his/her daily minimum fluid intake level by the 24-48 hours after surgery.** *At the very least, s/he needs to begin taking in her/his minimum daily recommended fluid intake by post-op day #2.*

PLEASE REFER TO APPENDIX B TO KEEP TRACK OF YOUR CHILD'S NECESSARY MINIMUM DAILY TOTAL FLUID INTAKE AND FOR A FLUID MEASUREMENT COMPARISON CHART

For the first 3 – 5 days after surgery, try to avoid "acidic" liquids such as citrus, tomato or cranberry juice as they tend to sting more than bland fluids, i.e. apple juice, white grape juice, etc. Similarly, very hot (temperature) drinks can "sting" during the first few days. Carbonated drinks do not cause bleeding; however, the fizzing action may be somewhat irritating to a freshly operated, ulcerated, raw area. Using a straw to encourage drinking is OK, but avoid excessive, aggressive suctioning action (thin straw, too thick liquid) as this may secondarily loosen the healing crust(s) and precipitate bloody spotting.

Dairy products are fine, such as plain milk, chocolate milk and milk shakes, but they tend to make oral secretions thick and "gummy" when compared to popsicles, sherbets, and smoothies. Most parents do not begin to give dairy products until the day after surgery.

TIP: **Consider keeping notes or a log of your child's total daily fluid intake and place on a visible area such as the kitchen counter where it will be easy to see (see chart provided). This is particularly helpful if more than one adult is looking after your child throughout the day and night.**

Be advised, you may need to sit your child on your lap to have them sip steadily. Or, you may need to squirt fluids into the mouth and, sometimes, pinch the nose and tilt their head backwards to force them to swallow. ***Maintaining adequate daily fluid intake is one of the most important responsibilities a parent or supervising adult has for a child recovering from an adenoidectomy or adenotonsillectomy.***

If your child becomes progressively dehydrated, their pain will worsen, their neck muscles may stiffen more, or they may become more tired and worn out. Physical signs of progressive dehydration are decreased amounts of highly concentrated urine output, "drying out" of the mucous membranes in the throat, a hollow looking appearance to the eyes, absence of tearing, and a weak or "thready" pulse. S/he may have to come to the emergency room or office for an evaluation.

On occasion, some children do not take in their necessary minimum daily fluid amount and become severely dehydrated requiring intravenous hydration, and possibly hospitalization for observation.

PLEASE CONTACT US IF YOU FEEL YOUR CHILD IS BECOMING DEHYDRATED.

Diet & Nutrition:

*** Prepare your child to be on a "mush diet" for the next two weeks! ***

FLUIDS & FULL LIQUIDS: Once fluids and "full liquids", such as jello, are well tolerated, it is OK to *offer* a few soft food "bites" early on and your child can try to eat on the day of surgery if they desire.

SOLIDS: After 3 - 5 days, the "healing crusts" have usually covered the "healing ulcers" where the tonsils and adenoids were removed and most *soft* foods are usually tolerated.

While most children do not want to eat soft solid food for at least a few days, some children seem to "bounce back" faster than others and may desire to eat on the day of surgery. **Once your child is taking solid food, to minimize pain with eating and to reduce the risk of postoperative bleeding, AVOID ALL *SCRATCHY / SHARP EDGED FOODS* UNTIL WOUND HEALING IS COMPLETED**

PLEASE REFER TO APPENDIX C FOR SOLID FOOD SUGGESTIONS

Advice from Parents…

Planning ahead can make the recovery a smoother process for everyone. During at least the first week following your child's surgery you should try to avoid trips in the car. Consider the following advice and prepare a check-list for your child's post-operative care until it is convenient to go shopping again.

Suggested Pre-Operative Shopping List:

- Over-the-Counter Pain Medication (acetaminophen and ibuprofen)
- Non-acidic juices such as apple, white grape, etc.
- Variety of popsicle, sherbet, and/or Jell-O flavors
- Videos / DVD's, Books & Games for entertainment

Helpful diet & medication hints:

- *"Ice chips cool the sores and when they melt they keep everything moist."*
- *"Have your child help make juice Popsicles or pick out his or her favorite flavor at the store – before surgery."*
- *"Jell-O or Jell-O Wiggles are fun."*
- *"For my younger children, the push up sherbet on a stick was easy to handle."*
- *"For medication dosing at night once awakened, our child did better after we gave a few small spoonfuls of a crushed / half-melted popsicle to numb the surgical sites first and lubricate her dried throat (from mouth breathing) before we gave her the medicine.*

Weight loss:

Most children will lose a little weight after tonsil or adenoid surgery because of decreased food and fluid intake during the recovery period. Once they are fully recovered, a pleasant surprise will be the ability to smell food better than before surgery because of the return

of adequate nasal breathing. Most children "catch up" to their expected weight shortly after returning to their regular, and often better, eating pattern.

Foul Odor:

It is common to notice a foul odor coming from your child's mouth beginning several days after surgery. The healing areas collect mucus and food particles. The human oral cavity has a high density of bacteria. This combination can create a very potent mix! Usually, the tonsil healing crusts are more self-cleansing compared to the adenoids healing crust which is protected by the palate.

While aggressive gargling is not recommended in the first few days after surgery, once the healing crusts have formed, gentle saline rinses, both nasally and orally, and use of a more pleasant smelling nasal emollient (often provided to you the day of surgery) can be helpful. Once the healing crusts dissolve or come off (10-14 days), the foul odor usually goes away.

Oral and Nasal Hygiene:

Initially after surgery, and for a few days afterwards, there may be temporary tongue swelling or shallow "ulcers" from the pressure created by the mouth opening device. Sometimes, you may also see a white discoloration to the tongue surface. This is not an infection and the tongue appearance usually returns to normal by the end of the first week.

A little farther back in the throat, you will be able to see the healing areas where the tonsils were removed when your child opens their mouth. The soft, mucous scabs will appear as yellow-white patches. This is a normal part of the healing process and is not to be confused with an active infection. **Avoid aggressive gargling in the immediate postoperative period (see "Foul Odor). Avoid aggressive nose blowing for 2 weeks if there has been adenoid surgery.**

If your child has to sneeze, have then use an "open mouth" technique. It is okay to brush the teeth. Just be careful not to push the toothbrush way into the back of the throat where it could inadvertently irritate the surgical site. And, be aware that some brands of toothpaste can sting a little more than others.

Breathing Patterns:

If your child has had a noisy or irregular breathing pattern it may not improve right away, and may even worsen a little following surgery. In fact, you should **expect a varying degree of postoperative congestion, snoring, and/or coughing** which may be relieved with nasal saline, topical over-the-counter decongestant nasal sprays, or with use of the provided decongesting nasal emollient.

Once the postoperative swelling resolves (several days to about one week), your child's breathing and sleeping patterns should steadily improve. Coughing may persist a bit longer due to increased postoperative mucus production, but typically subsides once the mucous crusts have fully dissolved away.

Voice Changes:

Be prepared to hear a change in your child's voice. Immediately after surgery there may be modest throat swelling that will make your child's voice sound muffled. This usually resolves in a few days. Most likely, if your child has had significantly large adenoids removed, their voice may temporarily become very "breathy" or "nasal." What has happened is that the moveable soft palate muscles no longer have a large adenoid pad to contact and now have to "learn" to touch the back wall of the throat. This results in air, and sometimes liquid or food particles, freely passing up through the nose. **With continued chewing, swallowing, and speaking, your child's soft palate should adjust and their vocal quality will most likely improve over time.** This process may take a week or two, or in some cases a month or two, rarely longer.

Activity:

We suggest limiting aggressive activity, including physical education classes, until about two weeks following surgery. This would include no swimming or diving. If your child plays a wind instrument, they should also refrain from practicing for 2 weeks. On the other hand, "normal" activities of daily living are reasonable to encourage, but with limited expectations early on because your child may still tire easily. In general, most children get back to Day Care / Preschool / Elementary-Middle-High School once tolerating at least a soft food diet (usually within 5-7 days). They may still not be 100% at this time, however. **Expect full return of energy and activity levels by the end of the second week of recovery. Please let us know if a note recommending activity restriction for school is required.**

REMEMBER: Think of the total recovery period as two weeks. The first week you are taking care of your child. During the second week, they begin to increasingly resume taking care of themselves to their level of maturity. Be aware that many children will often try to do more than they are ready to do! *(Age differences may affect the interpretation and application of the above principal.)*

Emotional Changes

Even though every effort is made to minimize the potential for psychological trauma during the perioperative experience, some children will exhibit episodic spasms of emotional stress, sometimes described as "night terrors" although daytime behavior changes can also occur. Beginning usually in the first recovery week, they may awaken from sleep in fear and, possibly, complain of, or display, uncontrollable anxiety, sometimes periodically throughout the day. These feelings may compound with each episode and regressive emotional behavior is occasionally seen. Although no specific medication is generally recommended to relieve the sensations, rest assured that over time – sometimes two to three weeks or more – and with continued close, loving attention to their physical and emotional needs, a return to normal is expected to occur, usually shortly after the wound healing process is completed and a normal diet is achieved.

Medications:

You will most likely receive at least three prescriptions for postoperative medications:

- **Acetaminophen-with-hydrocodone elixir.**
  As previously indicated, this liquid medication is not intended for long-term use with every dose. It should used as directed, usually 4 times a day, in a 3 hour rotation schedule with 4 times a day over-the-counter liquid ibuprofen, for 5 days, and then as needed to help bring any ongoing pain under better control.

- **Phenergan Suppository / Syrup**
  This can be used for significant or recurring postoperative nausea or vomiting. *(not initially prescribed for children younger than 2 years old)*

Children who have had the tonsils removed may also receive a prescription for:

- **Sucralfate suspension (for tonsillectomy only.)**
  This is a liquid anti-ulcer medication that coats the fresh surgical site, speeds up healing and, secondarily, reduces pain sensation. The dose is 3-4 times per day, "swish and swallow", an hour before or just after meals, if possible.

You may also receive a bottle of nasal emollient.

- **Ponaris Oil Nasal Emollient**
  This combination of oils can be used in the nose several days after surgery to partially mask the foul odor that can develop. While a few children may initially object to its oily texture, think of the drops as medicine that can help your child have an easier recovery. If the odor becomes uncomfortable to deal with, several drops in the nose, or coating the inside of the nose with a moistened cotton swab, 2-3 times a day, is usually sufficient to cover up the smell coming from the healing mucous crusts.

As of January 2013, post operative antibiotics are no longer considered mandatory. If your child does receive a prescription for an antibiotic, complete the course as written.

Discharge to Home:

In general, the timing of your child's "discharge to home" from the hospital is determined by the parent(s) level of comfort with postoperative care.

1) If your child is breathing spontaneously, AND
2) If oxygen supplementation is not required, AND
3) If repetitive breathing treatments are not required, AND
4) If there is no evidence of postoperative bleeding, AND
5) If adequate pain relief is obtained with oral medication, AND
6) If their oral fluid intake is baseline satisfactory, AND…
7) If there is no excessive nausea or vomiting, AND
8) If they have voided urine satisfactorily, AND
9) If there are no prolonged effects from general anesthesia, **THEN…**

Consider taking your child home if the post-anesthesia nurses confirm that there are no physiological or psychological restrictions to discharge. When you feel you are capable of handling the postoperative care, discuss this with your nurse(s) as they can prepare you and your child for discharge.

Because of very young age, co-existing medical condition(s), or response to surgery, *some* children are appropriately observed throughout the day or remain overnight in "23-hour observation" for clinical safety reasons. This is usually prepared for in advance, but on occasion, it is necessary to change a child from an outpatient status to an overnight observation status on the day of surgery.

Should you need to travel a great distance, you may feel more comfortable waiting a period of time comparable to the length of your drive home. If no "inadvertent event(s)" occur(s) over that time frame you will most likely be more reassured that your upcoming drive time will also be uneventful.

Follow-Up Appointment:

A routine postoperative follow-up examination is usually scheduled for approximately one month from the surgery date. You should have already received a first post-operative follow-up appointment at the time of your surgery counseling in the office. Please inform the post-anesthesia nurses if you already have this appointment. If you think you need to schedule a follow-up appointment, please call our office within one or two days following surgery so that a convenient first postoperative follow-up appointment can be scheduled. Please indicate that you are calling to schedule a *"first post-operative follow-up appointment."*

MEDICATION DOSING:

ACETAMINOPHEN (Tylenol, Panadol, Tempra, etc.)

Pediatric dosing is based on weight and can be given every 4-6 hours.
It is not recommended to receive more than 5 full doses in a 24-hour period.

IBUPROFEN (Motrin, Advil, etc.)

Pediatric dosing is based on weight and can be given every 6-8 hours,
It is not recommended to receive more than 4 doses in a 24-hour period.

HYDROCODONE (Hycet, Lortab)

Pediatric dosing is based on weight and should not be given more than every 4-6 hours.
Repetitive dosing may lead to constipation, stomach cramps, and decreased breathing.
The Hycet brand formulation can be safely taken every four hours for extended use.

PROMETHAZINE (Phenergan)

Pediatric dosing is based on weight and should not be given more than every 4-6 hours.
It is not recommended for patients under 2 years of age.
Repetitive dosing may lead to excessive drowsiness.

AMOXICILLIN or TRIMETHPRIM-SULFA ("antibiotics" – Amoxil or Bactrim)

Pediatric dosing is based on weight
and is taken three times a day (amoxicillin)
or twice a day (trimethoprim-sulfa).

Telephone Instructions

We are always available for your questions and encourage you to contact our office between 8:30am and 4:30pm, Monday thru Thursday, and until 2pm on Friday, for routine or urgent questions. Particularly in the first postoperative week, and within the first month after surgery, in general, please consider contacting our office first as we have a great deal of experience with relevant perioperative issues. **If you have urgent "after hours" questions, please call (904) 262-7368 and follow the voice prompts to contact Dr. Wohl (ext. 230) - or the on-call physician.**

Thank you for entrusting us with the care of your child.

PAIN MEDICATION SCHEDULE

Hycet, Lortab 12:00

Motrin 9:00

Motrin 3:00

Hycet, Lortab 6:00

Day 1

Day 2

Day 3

Day 4

Day 5

**insert medication times in boxes*

Please refer to the recommended dosing guidelines on the acetaminophen or ibuprofen containers and use only the prescribed amount of the narcotic medication.

Appendix B

RECOMMENDED MINIMUM DAILY FLUID INTAKE CHART

POUNDS	AMOUNT PER 24 HOURS
20	2 pints (32 ounces)
30	2 ½ pints (40 ounces)
45	3 pints (48 ounces)
65	3 ½ pints (56 ounces)
90	4 pints (64 ounces)
130	4 ½ pints (72 ounces)
175	5 pints (80 ounces)
200+	5 ½+ pints (85+ ounces)

"Daily Fluid Intake" equals the total *daily* volume of "Full Fluid" which means water, juice, Jello, popsicles, sherbet, snow cones, "slushies", milk, milkshakes, pudding, yogurt, ice cream, etc.

Your child's total ounces for each day ☐

Appendix C

FOODS TO AVOID

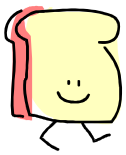
Chicken Nuggets
Pretzels
Potato chips
Nachos
Cookies
Crackers
Dry cereal
Fried foods
Pizza
Wild Rice
Steak
Hot Dogs
Sausage
Deli Meat

FOODS OKAY TO EAT

Scrambled eggs
Pancakes
Grits
Hot cereal
Soggy cold cereal
Oatmeal
Pasta varieties
Mashed potatoes
Soft boiled rice
Soups with boiled chicken

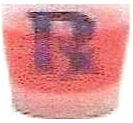
(not to hot!)

***Consider "non-scratchy solid foods",** such as sandwiches with soft bread (no whole grain or sharp crust)
and varieties of fine ground meat or fish (not too spicy!) once soft solid foods are tolerated well, often towards
the middle-to-end of the first recovery week.



FLUID MEASUREMENT COMPARISON CHART

Appendix D



Medicine Cup
30 mL
1 oz
1/8 cup

Small Milk Carton
240 mL
80z
1 cup

Soda Can
360 mL
120z
1.5 cups

Large Styrofoam Cup
480 mL
160z
2 cups

Baby Bottle
240 mL
80z
1 cup

Bottled Water
500 mL
160z
2 cups

Popsicle
90 ml
30z 1/3

Sports Drink
320z
4 cups

Soup Can
220 mL
7 0z
1 cup