PRE-OPERATIVE INSTRUCTIONS FOR CLEFT LIP SURGERY

THE WEEKS BEFORE SURGERY
- Please read through all of this paperwork several times before and after surgery. Any time you come up with a new question, we ask that you check this paperwork again. Chances are the answer is here.
- Instead of shocking your little one with too many changes at the time of surgery, try easing them into some of the things we will require. Wean that pacifier before surgery, because they will not be able to use it for three weeks post-op. Try sleeping in the car seat a few times, because this is the best position to protect the lip the week after surgery.
- Avoid ibuprofen or medications that could thin the blood two weeks prior to surgery.
- If the patient has an upper respiratory infection at the time of surgery, we will need to reschedule. It's nearly impossible to avoid those colds, but try to use good judgement on exposures when surgery is coming up.
- You may need some supplies at home. Tylenol drops, antibiotic ointment (any type), and possibly some reliable family members lined up for a few hours of valuable respite care the first week.

THE DAY BEFORE SURGERY
- Make sure you understand where the surgery is going to be performed, and what time you are supposed to show up.
- If you are coming in from out of town and staying locally the night before surgery, call the office with the phone number so we know how to reach you in case the surgery time changes.
- Your child needs to be N.P.O. (nothing by mouth) before surgery, or it will be cancelled by anesthesia. Solid foods or thick liquids need to stop 8 hours prior to surgery. Breast milk or formula can be given up to 4 hours prior to surgery. Water or clear liquids (such as apple juice, pedialyte, or water) can be given up to 2 hours prior to surgery. The reason for this is to prevent aspiration, or sucking stomach contents into the lung, which can be very dangerous.

THE DAY OF SURGERY
- Bring all of the paperwork you were given. The hospital will need your Consent form and History and Physical, so don't forget these.
- Bring any special nipples and formula that your child uses.
- Bring in the car seat; they will need it in the hospital room.
- Make sure you are comfortable as well. Wear clothes that you can sleep in and bring something to read.
CLEFT LIP SURGERY

DESCRIPTION OF THE CLEFT LIP

Clefts come in a variety of types, and it is good for you to accurately describe your own child’s cleft. They range from being barely noticeable (called a formes fruste), to complete, which means they travel into the nostril. The cleft may be on one side, called a left or right unilateral cleft lip, or it can be bilateral. A cleft lip can occur with or without a cleft palate.

DESCRIPTION OF THE CLEFT PALATE

Cleft palates vary in degrees of severity. It is possible that only the gum line is involved behind the cleft lip. They cleft often extends all the way back through the end of the soft palate, and this would be called a complete cleft palate. Just like the lip, the cleft may be barely noticeable (called a submucous cleft palate) or occur without an associated cleft lip.

YOUR CHILD’S CLEFT IS BEST DESCRIBED AS:

DESCRIPTION OF CLEFT LIP SURGERY

Recommendations will be made as to whether the lip should be repaired in one or two stages. The wider, more severe unilateral clefts associated with a complete cleft palate, and the bilateral cleft lips usually do better with a two-stage lip repair. The first surgery is called a cleft lip adhesion, and it serves to bring the two sides of the lip together, bridging the gap. This is not meant to leave the lip anatomically correct, but will allow the tissue to stretch so that the final cleft lip repair heals without tension, leaving a prettier scar. The second surgery is scheduled approximately 6 months after the first, and the palate surgery maybe performed at the same time. The incomplete or narrow unilateral cleft lips can be repaired as a single stage, and this surgery is called a cleft lip repair.

Cleft lip surgery takes about two hours, and will be performed under general anesthesia (meaning they will completely asleep). Numbing medicine will be placed at the time of surgery to keep them comfortable for several hours, and Tylenol is usually the only medicine needed once they are discharged. You are usually discharged the morning after surgery, but if your child is doing very well you may get to go home that evening.

YOUR CHILD IS SCHEDULED FOR THE FOLLOWING SURGERY:
CONSENT FOR CLEFT LIP SURGERY

There are risks associated with all surgeries including medication reactions, allergic reactions, pneumonia, and anesthetic complications. These risks can be serious and possibly fatal. The risks that are specifically related to cleft lip surgery include:

- **Bleeding:** Generally this is a very small amount, and transfusion is never even considered a risk. It is not unusual to see small amounts of fresh blood in the spit or on the dressings for the first one or two days following surgery.

- **Infection:** Lots of bacteria live in the mouth and nose, so antibiotics are given through the I.V. at the time of surgery. The antibiotics will usually be stopped at the time of discharge unless nasal packing or a nasal splint is placed at the time of surgery. It is important that you complete the course of antibiotics as directed.

- **Dehiscence:** This is the medical term for the incision splitting open. This can happen because of too much tension on the closure (i.e. the stitches pull through), infection, or from trauma or bumping the lip. Sometimes small areas of the wound will split, and there may be no long term problems.

- **Poor Appearing Scar:** We do everything possible to help the scar look nice at the time of surgery, but a lot can happen after we leave the operating room. Some people are prone to keloid or hypertrophic scars, and others heal with fine lines. For the first three months after surgery the scar will usually become more firm, raised and red. This is a normal process. At about 6 months the scar will start to soften, and at one year the color should turn from pink to white. We strongly encourage you to start massaging the scar with a scar cream like Mederma at about two weeks after surgery, and also to be extremely good about putting sunscreen on the scar every day for a year.

- **Asymmetry:** Although it is our goal at the time of the cleft lip repair, no repaired lip will be perfectly symmetric or even from one side the other. (Remember that after a cleft lip adhesion the goal is to get tissue across the gap, not to make it even). The asymmetry may be due to a tight scar, slight mismatch when performing the repair, or lack of bone in the cleft space, or a number of other reasons. We try very hard to get the sides as even as possible at every surgery following the cleft lip adhesion.

- **Stunting of Facial Growth:** Any surgery performed on a growing child has the potential to create scar tissue that limits the potential growth in that area. This is especially true with cleft lip and palate surgery, and may result in a profile where the middle third of the face does not project as much as the lower jaw creating an “underbite.” Braces may be all that is necessary to correct this, but some children may require orthognathic (jaw) surgery once they reach adolescence. Really the only way to prevent this is to not perform surgery, or to delay surgery until growth is complete.

- **Need for Further Surgery:** We can never guarantee that this will be your child’s only lip surgery, and most have a revision prior to entering school.

Medicine is not an exact science, so no guarantees can be made regarding complications or outcome. We do everything possible to ensure your child’s safety, and strive for the best result in every case. We hope that you will also do your part by following your post-operative instructions, using good judgement, and letting us know if there are any problems.

Please ask any further questions regarding the surgery or potential risks prior to signing this form. Your signature means that you have had a chance to read and discuss the common risks associated with cleft lip surgery, and that you agree to proceed. A separate consent form from the hospital will also need to be signed for the medical record.

________________________  ________________  ____________________________
Parent or Legal Guardian  Date  Witness  Date
# CLEFT LIP SURGERY POST-OPERATIVE INSTRUCTIONS

## ACTIVITIES
For the first week or two following surgery it is best to keep your child’s head elevated, and have them sleep face up to prevent injury to the incision. This is why the car seat is ideal.

## ARM SPLINTS
The arm splints are mandatory for the first three weeks. These are not as bad as they look. The splints should be snug enough that they prevent bending at the elbow but because of the shape of an infant’s arm they may slide off. Pinning them to clothing at the shoulder may be helpful or you can also try placing them under a long sleeved shirt. These need to be worn whenever the child is not being held, and be sure to perform range of motion at the elbow when the splints are off. Don’t throw these away, we may be able to use them again if your child is going to have a second surgery this year.

## DIET
You can immediately start using your pre-op nipple after surgery. Haberman nipples, Mead-Johnson feeders, or whatever you like. Sometimes it helps to make the hole in the nipple slightly bigger since it may hurt to suck. Breast feeding right away is also fine.

We usually try clear liquids first, then go to formula once your child has had a few sips. A liquid diet is mandatory the first week, then the second week you can increase the consistency to pureed foods. Keep all hard objects including spoons, straws, fingers, toys, and pacifiers out of the mouth for three weeks after surgery.

The goal is to have your baby drinking as much as they did before surgery, but chances are that will not happen for the first few days. There should be three or four wet diapers per day, and the following is a rough guide of their fluid requirements:

<table>
<thead>
<tr>
<th>For babies weighing</th>
<th>They need about</th>
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<tbody>
<tr>
<td>3 kgs. or 6.6 lbs.</td>
<td>10 ounces per 24 hours</td>
</tr>
<tr>
<td>4 kgs. or 8.8 lbs.</td>
<td>13 ounces per 24 hours</td>
</tr>
<tr>
<td>5 kgs. or 11 lbs.</td>
<td>17 ounces per 24 hours</td>
</tr>
<tr>
<td>6 kgs. or 13.2 lbs.</td>
<td>20 ounces per 24 hours</td>
</tr>
<tr>
<td>7 kgs. or 15.4 lbs.</td>
<td>23 ounces per 24 hours</td>
</tr>
<tr>
<td>8 kgs. or 17.6 lbs.</td>
<td>26 ounces per 24 hours</td>
</tr>
<tr>
<td>9 kgs. or 19.8 lbs.</td>
<td>30 ounces per 24 hours</td>
</tr>
<tr>
<td>10 kgs. or 22 lbs.</td>
<td>33 ounces per 24 hours</td>
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<tr>
<td>12 kgs. or 27.5 lbs.</td>
<td>36 ounces per 24 hours</td>
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<tr>
<td>14 kgs. or 30 lbs.</td>
<td>39 ounces per 24 hours</td>
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<tr>
<td>16 kgs. or 35 lbs.</td>
<td>42 ounces per 24 hours</td>
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<tr>
<td>18 kgs. or 40 lbs.</td>
<td>45 ounces per 24 hours</td>
</tr>
<tr>
<td>20 kgs. or 44 lbs.</td>
<td>48 ounces per 24 hours</td>
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WOUND CARE FOR CLEFT LIP SURGERY

The incision has been closed in multiple layers, with strong absorbable sutures placed underneath the skin. There are many ways to close the skin and once surgery is finished we will tell you what kind of sutures were placed.

When your child comes out of surgery there will be a dressing placed over the lip, consisting of a small piece of yellow greasy gauze (called Xeroform) and paper tapes (called Steri-strips). This dressing will get very bloody in the first 24 hours, and will probably be changed before you leave the hospital. You may need to change this at home, so be sure to take supplies home from the hospital.

This dressing helps protect the incision, keep it moist and you calm. The Xeroform gauze is cut into the size of a postage stamp, and is placed directly on the incision. You can add a pea-sized dot of antibiotic ointment to keep it extra moist so that it will never stick to the sutures. You can then secure the Xeroform with one or two Steri-strips or paper tape. As long as it looks pretty clean you can leave it for two or three days. The pink portion of the lip will tend to get dry, so add extra antibiotic ointment here a few times per day. This dressing is very nice for the first week, and it is fine if you want to continue using it into the second week.

- **Blue or Black Removable Suture**: If the skin was closed with blue or black sutures they need to be removed in 3-5 days. If you choose to leave the lip dressing off, antibiotic ointment (any kind is okay) needs to be applied to the sutures 3 or 4 times per day. Be sure to place a lot of ointment on the pink part of the lip where several white absorbable sutures are placed, as this tends to dry out and get crusty. It is okay if the sutures get wet after the first 24 hours, but you do not have to actively clean them. If they get really caked with junk, you can gently clean them with a gauze and dilute peroxide (half water). Peroxide tends to turn incisions red and delays healing, so do not overuse it.

- **Dissolving Suture**: We often use a skin suture that will dissolve over time, especially for cleft lip adhesions. These can be covered with antibiotic ointment, Xeroform, and Steri-strips every few days, or left open with antibiotic ointment placed 3-4 times per day. The sutures on the skin will dissolve in a few days, but those on the pink portion of the lip or inside the mouth may take a few weeks. If they are still present after two weeks, we can snip any out that are irritating.

- **Dermabond**: This is a medical type of super-glue that helps seal and close the skin. This requires no care the first week, but you can keep it covered with the Xeroform and Steri-strips if you would like. The only place that needs antibiotic ointment is the pink part of the lip. The Dermabond looks like clear nail polish on the skin, and it will start to lift off after the first 5 days. When it starts to peel up at the edges it can be removed like taking off a piece of tape. If there are any areas of scab or raw spots after the Dermabond has been removed, you can treat them with antibiotic ointment three times a day until they are healed.
NASAL SPLINT

A nasal splint, or soft rubber tubes in the nostrils, may be present following surgery. This will help to hold the nostrils in a more symmetric or even position while they heal. A suture is placed at the time of surgery to hold the splint in place. If for some reason the splint falls out, please do not throw it away. Further instructions will be given at the follow-up appointment. Remember that we want your child to be on oral antibiotics the first 5 days after surgery if the splint was placed.

SCAR CARE

Once the incision looks completely healed (usually between the first and second week) you may begin to massage the scar. This is a very important part of the care, and if neglected, you may end up with a much less attractive scar. We recommend using Mederma, which is a scar cream that comes from onion skin. A very small amount should be rubbed into the scar 3 or 4 times a day for 2 to 4 months after surgery. Sunscreen is also very important for the first year following surgery. Waterbabies is waterproof, higher than S.P.F. 15 and formulated for children, so it would work well if you need to buy some.