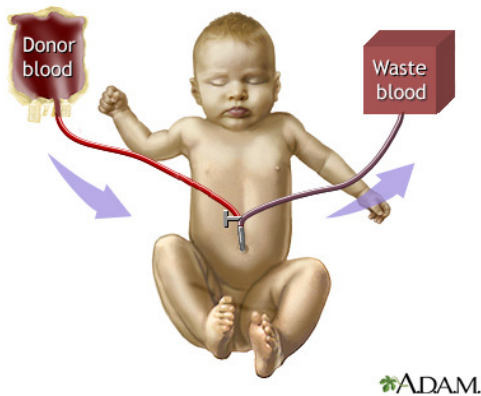


Exchange Transfusion

In severe cases of neonatal jaundice, another effective treatment is exchange transfusion.

In this procedure, small amounts of blood are removed from the baby and replaced with donor blood. This procedure is repeated until roughly twice the blood volume has been replaced.

This treatment is not given at the SMMC.



Points to consider during the Treatment

Adequate fluids and balanced nutrition is essential. Fluids help the body by moving the excess bilirubin to the stool. Babies with a history of inadequate fluid intake are more susceptible to neonatal jaundice.

Expect soft stools during the treatment, especially if the baby is undergoing phototherapy. It is not diarrhea.

Breastfeeding may be stopped when a baby has jaundice. Breast milk is known to have certain hormones in it that impedes bilirubin excretion. A special milk will be prescribed by the physician instead.

A baby on phototherapy must be exposed under the lamp as much as possible. Handling time of the parents may be limited.

An eye shield is placed on the baby to only prevent eyestrains. Phototherapy lamps have a built-in UV-filter to protect the baby's skin from burns and overheating.

Premature and low-birth weight babies are more susceptible to neonatal jaundice.

It is important for parents to inform the doctor or the nurses of any of the following in the parent's medical history:

- ◆ A previous child with jaundice.
- ◆ Any drugs taken by the mother during pregnancy.
- ◆ Any illnesses or infections the mother had during pregnancy.
- ◆ A history of hypothyroidism or liver disease in the family.
- ◆ Difficulties during the baby's delivery.

The risk of significant jaundice can often be reduced by feeding babies at least 8 to 12 times a day for a first several days.

Contact information

St. Maarten Medical Center

Pediatric Ward

Welgelegen Road 30

Cay Hill

St. Maarten

Tel: +1 (721) 543-1111 ext 1110

Fax: + 1 (721) 543-0116

Email: info@smmc.sx

Web: www.smmc.sx

Neonatal Jaundice



Baby with severe jaundice

SAFETY
HEALTH
SATISFACTION

The pillars defining our quality care

We Care Together!

S | **M**
M | **C**

St. Maarten Medical Center

A publication of SMMC - July 2014

What is neonatal Jaundice?

Neonatal Jaundice or the **yellow discoloration of the skin**, is the most common condition that requires medical attention in newborns. It is common in 70% of all newborns.

Jaundice happens when a substance in the blood; called **bilirubin**, gets too high and it gets stored in the fat layer of the skin causing the skin to look yellow.

Neonatal Jaundice, most of the time, is a completely normal phase a newborn passes through and is never caused by what the mother has been eating during pregnancy.

In some cases though, if bilirubin levels are excessively high, neonatal jaundice can permanently damage the baby's brain. For this reason, early medical treatment for jaundice is very important.

Not all Jaundices are the same!

Jaundice in babies can be grouped into two:

Physiologic Jaundice is the most common between the two. Bilirubin, the substance that causes jaundice, naturally builds-up after a few days of being born. It makes the skin appear yellowish.

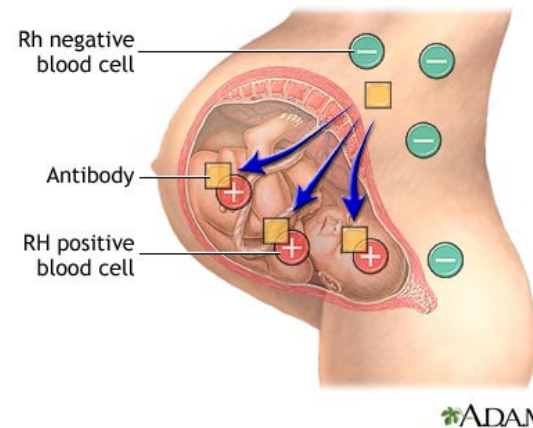
Pathologic Jaundice, the jaundice is caused by something else. Most commonly it is caused by active infections, some trauma or difficulty during the birth process and blood type incompatibilities.

Any type of jaundice if left untreated can cause brain damage

Blood Compatibilities

During pregnancy, red blood cells from the fetus can get into the mother's bloodstream as she nourishes her child through the placenta.

If the mother is Rh-negative, her immune system treats the Rh-positive fetal cells as if they were a foreign substance and makes antibodies against the fetal blood cells. These anti-Rh antibodies may cross the placenta into the developing baby, where they destroy the baby's circulating red blood cells.



When red blood cells are broken down, they make bilirubin, which causes an infant to become yellow. This is called **Rhesus Incompatibility**.

Another scenario is when a Type-A blood mother is carrying a Type-B blood fetus. The type-A blood considers the fetus's type-B blood to be a foreign substance as well and tries to eliminate it. This causes blood cell breakdown on the fetus that increases the

fetus's bilirubin levels. This, among other scenarios, is called **ABO Incompatibility**.

How can I tell if the baby is yellow?

A basic procedure that can be done to check for jaundice is to gently apply pressure on the baby's forehead to blanch the skin. Any yellowish discoloration of the blanched skin may indicate further assessment for jaundice. **This however cannot be accurate and should not be solely relied on.**



A baby can also be observed to be drowsy, less active and /or not drinking as good as before may also be related to a present jaundice.

A routine laboratory blood work can be done to correctly measure how high the bilirubin is.

Medical treatment will be then based on the result along with a complete medical assessment by a physician.

Treatment to expect in the hospital

The physician may start an **IV fluid line** to provide the baby with the needed supplemental fluids. Increased fluid intake; whether from feedings or through an IV therapy greatly helps the body in eliminating the excess bilirubin.

The IV line can also be used as a way to administer medicines if needed. Antibiotics are usually necessary to stop the underlying cause of the jaundice.

Phototherapy may be started as well. This is done by exposing as much of the baby's body under a specific strength of light. The light passes through the body and breaks down the bilirubin underneath the skin; the light may appear blue, green, yellow or white. It takes a few days under the lamp to achieve the desired effect.

