Synacthen (ACTH)
ACTH – Adreno Cortico Tropic Hormone
Brand name: Synacthen

This medicine is:
A copy of a hormone (steroid) made in the body by the pituitary gland. The hormone keeps the body’s natural chemicals and minerals in balance.

For reasons we do not understand, Synacthen may control infantile spasms and some other types of seizures. If your child’s spasms do not stop with Synacthen, the doctor may suggest another drug.

Give this medicine:
In the right way:

Synacthen adds to the body’s normal supply of ACTH. It can disturb the body’s balance of chemicals and minerals. Please do not change the dose or schedule without advice from your doctor.

DO NOT give your child any medications, not even over-the-counter medicines, without checking with your pharmacist or doctor. Other medications such as those with acetylsalicylic acid (aspirin) may not be safe to take with Synacthen.

Synacthen cannot be swallowed, it is only available as an injection.

1. Draw the exact dose into a syringe with a 25 gauge, 5/8” needle.
2. Inject into the thigh muscle. Alternate legs for each injection.

The doctor may arrange for a home care nurse to give the injections.

In the right dose:

Measure the exact dose.
Never give more than 1 ml per injection

At the right times:

Most children take Synacthen every other day. (Some other forms of ACTH are injected daily.)

For the right number of weeks/months:

Most children take the medicine for 2 – 3 months. The child is slowly “weaned off” the medication so that the body can adjust its own natural supply of hormones and chemicals.

Never stop this medication suddenly.

Possible Side Effects:
Steroids are powerful medicines that can treat some conditions with great success. But, like all medications, Synacthen may cause unwanted effects along with the good effects. Some of these may be harmful while others are just bothersome. Your doctor has suggested this medication because s/he believes it will do more good than harm. Your doctor will be watching and testing to make sure that Synacthen is not harming your child. Please keep all follow-up appointments.

1. The following effects are common and can be serious

Weak immune system; unable to fight infections.

Signs: Colds, cough and other infections
Actions: Call at first sign of illness (poor appetite, no energy)

Synacthen may mask a fever. NEVER ignore signs of sickness no matter how minor they seem. Children on Synacthen may be sick even though their temperature is normal. Get all the blood tests arranged by your child’s doctor. These will show if the immune system becomes dangerously weak.

Take extra care to keep your child away from children who have, or may have, chicken pox. Chicken pox is a serious disease for children on Synacthen. Their immune system cannot keep it in check. If your child has never had chicken pox, and comes in contact with the disease while on Synacthen, call your doctor at once. The
doctor may decide to give a drug called *Zoster Immune Globulin* to help the immune system.

Discuss skin immunization with your doctor. Live vaccines like oral polio, mumps, measles, rubella (German Measles) may not be safe. Vaccines which are not live vaccines - such as diphtheria / tetanus, killed polio virus and HIB (influenza) - are safe.

2. **These effects are not common but they can be serious:**

   Notify the listed health professional if your child develops any of the signs mentioned here.

   **Stomach ulcers and bleeding**
   
   **Signs:** Black, tarry stools
   **Actions:** Call _____________________ right away.

   **Electrolyte (minerals and salts) imbalance in the body**
   
   **Signs:** Low energy
   **Actions:** Arrange with _____________________ for blood tests _______ per week

   **Body tissues retain water**
   
   **Signs:** High blood pressure (BP); sudden weight gain; puffy feet.
   **Actions:** Home care nurse to check BP _____ per week.

   Record BP readings on the chart at the end of pamphlet.

   If BP is outside normal range for 3 times in a row, notify _____________________

   **Allergic reaction**
   
   **Signs:** Skin rash
   **Actions:** Call _____________________

3. **The following side effects are not serious but may be bothersome.**

   They will disappear when the child comes off Synacthen.

   **Irritability and restlessness**
   
   **Signs:** “Grouchy”; cries a lot; is hard to soothe
   **Actions:** Pat, walk or soothe.

   Try not to use the bottle as a soother because body tissues hold extra water causing blood pressure to rise. Be aware that the steroid’s effects may make it very hard to calm baby.

   Your baby may feel “edgy” and grumpy in a way that neither baby or parent can control. Crying is not a sign that you are not a good parent. It is not a sign that baby is spoiled or difficult. It is an effect of the medication that is hard to control.

   **Hunger and weight gain**
   
   **Signs:** Hungry; wants to feed all the time
   **Actions:** Try to distract, rather than feed

   Talk to the nurse or dietician about the right number of feeds for your child. Weigh baby _____ times per week.

   **Note:** Report sudden weight gain to _____________________

   **Darker or “putty” skin colour; body hair; sweaty skin**
   
   **Actions:** No action is necessary
Record of Blood Pressure and Weight

Normal Blood Pressure Values at Various ages

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Systolic</th>
<th>Diastolic</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Range</td>
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<td>65-115</td>
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<td>1-2</td>
<td>96</td>
<td>69-123</td>
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<td>102-140</td>
</tr>
</tbody>
</table>

Parent: Bring this record with you on follow-up visits.

At BC Children’s Hospital, you are an important member of your child’s health care team. Ask questions so you understand and can be part of decisions about your child’s care and treatment.

Developed by the health care professionals of the Neurosciences Department with assistance from the Department of Learning & Development

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