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Please note:
The content of this newsletter is intended for basic information only and not as personal medical advice. Please note that the Society does not endorse the information provided by guest speakers. Meeting minutes/notes are prepared by non-medical volunteers. Readers are advised to consult their own doctors before making changes to their Addison/Adrenal Insufficiency management program.

News and Announcements:
We are pleased to provide an important new document intended to assist your Physician in your care. SURGICAL GUIDELINES (attached at the end of the newsletter) will provide your Doctor with important information on the recommended care for patients with Addison’s and other forms of Adrenal Insufficiency.

FOR PHYSICIANS is a new heading on our website Home Page www.addisonsociety.ca. This Surgical Guidelines document is the first to be included in this section. We will add other important documents to this section regarding the treatment of Adrenal Insufficiency. The objective is to simplify navigation of our site for the Physician seeking treatment advice/recommendations.

This document will also appear on the website under the heading EDUCATION and comes with a caution to patients:

This Surgical Guidelines document is published for the convenience of attending physicians. (Members and adherents of The Canadian Addison Society who may also access this document should share it with their Physician(s) and not be personally concerned about having access to the equipment described in the document).
Editors Comments
newsletter@addisonsociety.ca

Have you had an experience with Adrenal Insufficiency either as the patient, caregiver, family, friend, nurse, doctor or any other role? Please consider sharing your story for our Personal Experiences section, for the benefit of others. You may do so anonymously. Please forward to newsletter@addisonsociety.ca

President’s Comments
president@addisonsociety.ca

- Congratulations to all members of The Canadian Addison Society. We are approaching a New Year and there are NO annual dues to pay for 2018 or beyond. If you are currently a member, this will be the first non-renewal year for all of us.

As our Secretary-Treasurer reported at the Annual General Meeting in October, our membership is at an all-time high. The new Lifetime Membership policy enacted at the beginning of 2017 is credited with much of this increase in membership. However, the membership increase is not important just for the sake of larger numbers but for the increased credibility and more resounding voice it provides the Society in our advocacy work on behalf of all with adrenal insufficiency, whether primary or secondary, coast to coast to coast.

- We had a record attendance at the Annual General Meeting, with wonderful participation by those in attendance including members of the Lower Mainland BC Support Group who joined us via video link. We hope other Support Groups across Canada will consider joining us next year. If you wish to access the minutes of the meeting, including election results, they are available on the Home Page of our website www.addisonsociety.ca. The link may be found at bottom centre of the Home Page.

- Several Support Groups across Canada are seeking either a replacement or a first Regional Representative. Please refer to the Support Group Reports section of this newsletter for more information.

- The following is a quote from my President’s Report given at the October Annual General Meeting regarding our volunteers and I feel it needs to be repeated here. As a 100% volunteer organization, we exist because of volunteers:

  "I want to take this opportunity to thank all volunteers across Canada for their contribution of time, talent and empathy. It doesn’t matter if you are the Doctor volunteering as the Society’s Medical Advisor, or the President, or the member that arrives early to set up tables and chairs at a meeting, you are all important and because of you, the Society works for all of us. Thank You!!"

As we approach the festive season, from my family to yours, we wish you a Merry Christmas and Happy New Year.
Support Group Contact Information & Meeting Reports

**B.C. - Vancouver Island Support Group**

Meeting Minutes – October 7, 2017 1:00 to 2:55 PM

Our fall meeting began with Derek apologizing for scheduling this meeting on Thanksgiving weekend. Most at the meeting were patients of Dr. Richard Phillips who moved to the Okanagan at the end of the summer. Unfortunately, a few of the Vancouver Island people were left without an Endocrinologist and were expected to be treated by a Family Doctor going forward. As well, a few people were affected by referrals to Dr. Galina Smushkin, who began a maternity leave prior to their first visit. We believe that everyone with Addison’s disease should see an Endocrinologist on a regular basis.

We spent a few minutes discussing the use of melatonin as a sleep aid. Some doctors are suggesting that melatonin may interfere with Florinef. We were unable to find any relevant material on this issue, but a recent Huffington Post article reminds us that the unregulated nature of this supplement may give us cause for consideration. Although synthetic melatonin is chemically identical it may contain fillers, inert and other ingredients that may cause effects that would not be expected with natural melatonin. There is plenty of advice about how much melatonin to take but a good dosage guideline, according to a 2001 study from the Massachusetts Institute of Technology, is 0.3 milligrams. The research was conducted by Richard Wurtman, who pioneered the pharmaceutical use of melatonin as a sleep aid in 1994. Pills and supplements often contain far more than that amount in a single dose.

One of our favorite Addison’s references is currently being rewritten and updated. We will let you know when “Living with Addison’s Disease – An Owner’s Manual” is available for download.

We also had a look at a new iPhone app that one of our members is using. “ICE LifeAssyst” is a free app that seems like it is worth a try and is of course, available in the App Store.

The next meeting is tentatively planned for February 17th, location TBA.

1) **Prednisolone is associated with a worse lipid profile than hydrocortisone in patients with Adrenal Insufficiency.** **Author:** M Quinkler, Germany  
   [http://www.endocrineconnections.com/content/6/1/1.short](http://www.endocrineconnections.com/content/6/1/1.short)

2) **Ramadan fasting in patients with Adrenal Insufficiency.** **Author:** Mélïka Chihaoui, Tunisia  

3) **Is physiological glucocorticoid replacement important in children?** **Author:** J Porter, Sheffield, UK  
   [http://adc.bmj.com/content/102/2/199](http://adc.bmj.com/content/102/2/199)

4) **The role of general practitioner in the recognition of Adrenal Insufficiency.**  
   **Author:** M Dudzińska, Poland  

5) **Long-term safety of once-daily, dual-release hydrocortisone in patients with Adrenal Insufficiency.** **Author:** AG Nilsson, Sweden  
   [http://www.eje-online.org/content/176/6/715.short](http://www.eje-online.org/content/176/6/715.short)

6) **Management of Endocrine Disease: risk of overtreatment of patients with Adrenal Insufficiency: current and emerging.** **Author:** G Mazziotti, Italy  
   [http://www.eje-online.org/content/early/2017/06/05/EJE-17-0154.abstract](http://www.eje-online.org/content/early/2017/06/05/EJE-17-0154.abstract)
Support Group Contact Information & Meeting Reports continued

B.C. - Vancouver Island Support Group continued

7) Self-management in Adrenal Insufficiency — towards a better understanding. Author: D Kampmeyer, Germany

https://www.jstage.jst.go.jp/article/endocrj/64/4/64_EJ16-0429/_article

8) Diagnostic accuracy of basal Cortisol level to predict Adrenal Insufficiency in Cosyntropin testing: results from an observational cohort study with 804 patients. Author: T Struja, Switzerland


9) Update on Adrenal Insufficiency: diagnosis and management in pregnancy. Author: F Langlois, Oregon, USA

http://journals.lww.com/coenocrinology/Abstract/2017/06000/Update_on_adrenal_insufficiency___diagnosis_and.5.aspx

10) Clinical characteristics of adrenal crisis in adult population with and without predisposing chronic Adrenal Insufficiency: a retrospective cohort study. Author: M Iwasaku, Japan

https://bmcendocrdisord.biomedcentral.com/articles/10.1186/s12902-017-0208-0

11) Primary Adrenal Insufficiency is associated with impaired natural killer cell function: a potential link to increased mortality. Author: I Bancos, Birmingham, UK

http://www.eje-online.org/content/176/4/471.short

12) Which are the factors and causes of death in patients with Adrenal Insufficiency? Mortality data from EU-AIR. Author: M Quinkler, Germany


13) Exploration of knowledge and understanding in patients with primary Adrenal Insufficiency: a mixed methods study. Author: LM Shepherd, UK

https://bmcendocrdisord.biomedcentral.com/articles/10.1186/s12902-017-0196-0

For further information on the Vancouver Island Support Group, please contact Derek Clarke at vancouverislandaddisons@gmail.com or (250) 857-4320.

For further information on Central Island activities, please contact Sharon Erickson at ericksons.shaw.ca.

BC - Lower Mainland Support Group

Oct 14.2017, at the Poirier St Library, Coquitlam BC

Meeting chaired by Geoff Metcalfe; total attendance 15 members

After some fine tuning by Member Juvena Burns we joined the CAS Annual General Meeting in Ontario via video link at 10:12 am. The Ontario AGM meeting was chaired by the Society’s Secretary/Treasurer, Rick Burpee. We were pleased to be able to see, hear and interact with the Ontario meeting. (Due to some technical issues, we missed about 5 minutes of audio.). This was the second time that we have done so.
BC - Lower Mainland Support Group continued

Summary/Highlights of the AGM:

* Harold Smith has agreed to serve one more year as president. A full slate of Officers and Directors was also elected. The Directors for BC are Gerry Ott and Derek Clarke.

* Harold again stressed the importance of carrying the CAS identity card. It alerts medical professionals to our situations and needs and could be a life saver.

* Current national membership is 190 – the highest ever.

* Harold related the history of Ontario’s recent provincial approval for all paramedics to inject AI patients with their own kits. The Society has been in touch with every province and territory, as well as the Federal Health Ministry, advocating for paramedics to be given permission to administer our emergency injections.

* The Society has received a letter from the Canadian Society of Endocrinology and Metabolism, "to support the Canadian Addison’s Society in their efforts to ensure that emergency hydrocortisone administration for Emergency Medical Services is available not just in Ontario but in all provinces and territories in Canada”.

* New surgical guidelines have been created, and will soon be on the CAS website; they were given out to members in Ontario at the meeting.

* Canadian Association of Emergency Physicians (CAEP) has been in dialogue with CAS; Harold Smith is hoping they will create a module on Addison’s to place in the training manual on their website for access by Emergency Room Physicians

* A brochure holder has been made available for doctors’ waiting rooms. All members are encouraged to distribute the CAS brochures.

The CAS AGM was adjourned at 10:46am, and Geoff Metcalfe called the Lower Mainland General Meeting to order:

1. Round table discussion based on the question: What is one new thing you’ve learned about Addison’s in the last year?

A lively discussion ensued, and the 15 member’s present shared experiences that included:

* ER visits (not always positive)
* The importance of keeping a written record of symptoms, tests, doctors’ letters, etc.
* The importance of having potassium levels tested
* Processes for getting “red flagged” at our local hospitals to speed up/avoid triage when presenting in crisis. It was suggested that we make appointments with medical directors of our hospitals to get ourselves “red flagged”.

2. Member Judy Whittaker conducted a practice session for emergency injection of Solu-Cortef. All the CAS members and their support persons participated

3. Meeting was adjourned at about 12:50pm, followed by sandwiches and coffee

For further information on this Support Group please contact Geoff Metcalfe at calfe579@telus.net or 604-533-0579.
Support Group Contact Information & Meeting Reports  continued

Alberta - Edmonton Region Support Group

For information on this support group, contact Ginny Snaychuk at ginray@shaw.ca or 780-454-3866 in Edmonton.

We are searching for a volunteer to take on the Regional Representative role in the Edmonton Region. If you are interested, please contact either Ginny Snaychuk at ginray@shaw.ca or Harold Smith at president@addisonsociety.ca.

Alberta - Calgary Region Support Group

We were pleased to learn of the Support Group meeting held October 21, in Calgary. The first in that region in quite some time. The meeting was hosted by member Christina Wienecke and attendance was excellent.

Christina shared these photos taken at the meeting. She reports the group had lots of excellent conversation. No one present had met anyone else, which added to the event and this was described as “quite great”. It was an opportunity for people to tell their stories.

Another meeting is being considered for next spring (May 2018). Watch the meetings schedule on the website as this time approaches.

For information on this support group, contact Ginny Snaychuk at ginray@shaw.ca or 780-454-3866 in Edmonton.
Support Group Contact Information & Meeting Reports  continued

**Saskatchewan Support Group**

We have a very close group of Addison ladies here in Saskatoon. We have amazing gals in our group and we support each other. Some of us frequently contact each other by phone or by private group on messenger. We discuss all aspects of Addison’s.

We meet for coffee as a group as often as we can at a local restaurant. These coffee times are so very important to us. We laugh together, shed tears and support and pray for each other. We are so blessed to have this group. Some of the gals are dealing with great trauma and personal loss. So important to have such a good group.  *Jeannette Weber*

We are trying to arrange the next main support group Saskatchewan meeting in Regina sometime in the future. It will be posted on the CAS website.

For information on the Saskatchewan Support Group, contact Elizabeth Hill 306-236-5483 elizabethhill10@hotmail.com.

**Ontario - South/Central Support Group**

**South/Central Ontario Support Group Meeting Report**

The South-Central Ontario Support Group met in Woodstock, Ontario on Saturday, October 14, 2017 at The College Street United Church. There was a fabulous turnout of about 45 people including several first timers whom we were all pleased to welcome. Many travelled for hours to attend.

The group hosted the Society’s Annual General Meeting and we were very pleased to have the Lower Mainland BC Support Group join us via video link.

The minutes of the AGM may be found by following this link;  
[http://www.addisonsociety.ca/pdfs/annual-general-meeting-2017-minutes.pdf](http://www.addisonsociety.ca/pdfs/annual-general-meeting-2017-minutes.pdf)

An Emergency Injection Training Clinic was also a key part of the program.

The question and answer and sharing part of the meeting was interesting as always. Two members shared about using an injectable pump type delivery system for their medications. While this would not be useful in every situation it was interesting to hear about their ongoing positive experiences. We learn a great deal from sharing our stories with each other. Thank you for coming out, for listening and for sharing.

For further information on the activities or meetings of the South/Central Ontario Support Group, please contact Becky Sparks in Sarnia at rebeccalouisepacker@gmail.com, 519-402-2833.
**Ontario - Eastern Support Group**

We are searching for a volunteer to take on the Regional Representative role in the Ottawa Region. If you are interested, please contact.

For more information on Eastern Ontario Support Group activities or meetings, please contact Harold Smith at president@addisonsociety.ca. Those located in Quebec, near Ottawa, would be most welcome at our meetings.

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**Quebec - Montreal Region Support Group**

For information on Montreal Region Support Group activities or meetings, please contact Shelley Saklatvala, email shell326@hotmail.com or telephone 514-991-0294.

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**Quebec - Québec City Region Support Group**

We are searching for a volunteer to become our Regional Representative for a Quebec City Region Support Group. If you can assist in this volunteer role please contact Harold Smith, president@addisonsociety.ca. In the interim, if you are trying to connect with the Society for support please call our Montreal Area Regional Representative, Shelley Saklatvala at 514-991-0294 or you may also call the Society via our Toll Free number 1-888-550-5582 or email info@addisonsociety.ca or president@addisonsociety.ca.

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**Atlantic Canada Support Group**

For information on the Atlantic Canada Support Group activities or meetings, please contact, Holly Mclean at hquilter@nb.sympatico.ca or telephone 506-546-1687. Holly lives in northern New Brunswick.

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**Medical Q & A’s**

**Question 1**

Though it took ten years of seeing every internist in here in NL and still being told it's was a psychiatric problem and other issues which were all as far from the proper diagnoses as possible. Finally, after ten years I was diagnosed with Primary Addison's Disease. Honestly, I was lucky because a friend of mine who was a Specialist himself, however not in Endocrinology, asked a colleague of his to look at me and that's the guy I owe my life too.

After just over an hour in his office and a blood test done prior to leaving the hospital he asked me to come back the following afternoon. This is when he gave me the diagnoses saying that he'd have to refer me to someone in this field. I was actually happy to hear something showed up in my blood work. Not something you'd usually be happy to hear but finally I had a diagnosis. My question to you is: Would emotional stress be as bad as physical, depending on how much physical stress we are talking about. Reason I ask is logically thinking but I'm far from a smart person. An Addison's Patient or anyone as far as that goes would generally have more emotional stress per day than Physical. If someone is going to have a physical issue once, twice or even three times on a given day which is to the extreme, we deal with emotional stress all day long or certainly could. If I'm correct in saying this or trying to explain it, wouldn't it be cause to stress dose? Again, certainly not every time you feel an emotional something but we all know when our body has had enough. My Specialist made it adamantly clear that I never increase my Cortef unless I am fighting an infection which is logical or having or had a physical problem take place whereas there would not be adequate amount of Cortisol the body needs. I completely understand this. My question to my specialist yet I am unable to ask is why isn't she seeing what I am with Emotional and Physical Stress.
Medical Questions and Answers continued

Unless the specialist feels that I would be stress dosing every other day which would be ludicrous. I have no other answer unless I am totally wrong in needing extra Cortef if the body is going through a noticeable amount of emotional turmoil. I sure hope I’ve written this well enough for you to figure out what I’m asking. I’ve been out of the business aspect of life for much too long and cannot even recall how to explain what I’m trying to say. Thank You very much for your time and patience.

Response 1

You have asked an important question. This comes up quite frequently and the answer is not easy because stress is personal and difficult to quantitate.

The dose of cortisol that you take daily is designed to cover your normal day to day activities which will include a certain amount of stress. We all respond to stress differently, so what I may feel is a big problem, you may take in your stride. There are some stresses that are understandable such as illnesses in family members or health problems with children. Other stresses such as pressures at work are difficult to assess and to quantify. If some specific problems come up, it is reasonable to increase your cortisol by 1/2 or 1 tablet daily for a few days to deal with the situation and then cut back to your usual dose. How much cortisol you take depends on how severe you perceive the situation. This does not mean that you would increase your cortisol each time feel a little upset. The basic rule is that you have to think for your adrenals, they normally increase the output of cortisol to help deal with new problems and the amount is comparable to the degree of the problem.

Your endocrinologist is trying to be sure that you do not take too much Cortisol, so you should review your situation with her, so you are both in agreement on dealing with severe stress.

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Question 2

I am currently seeing a doctor of Internal medicine. Symptoms all lead to Addison's disease minus the pigmentation, although I have slight reddish-brown discoloration down the sides of my neck. Blood pressure is consistently low and drops significantly upon standing. So far, no specific testing has been done. He prescribed 5mg prednisone in AM and 2.5mg in PM. As well as .1mg Florinef. I responded fairly well to the medication. He feels based on my symptoms, blood pressure issues and my response to the medication that this warrants a diagnosis of Addison's disease.

My question is, do I accept this as a correct diagnosis? Should I push for further testing to confirm? I don't want to be on steroids unnecessarily if I don't have to. This doctor has other Addisonian patients so I'm not questioning him personally. I think it's more about peace of mind for me. Any suggestions?

Response 2

You are correct in wanting to be certain about your diagnosis. Most people would feel better, at least temporarily, if they were put on 7.5 mg of prednisone a day. The fact that you feel better would be in keeping with a diagnosis of Adrenal Insufficiency, but it could also non-specific and certainly would not be used to make the diagnosis.

You said that you had not had any investigation before being put on prednisone. This would be unusual. Even with a diagnosis of Adrenal Insufficiency, there are two possibilities. Primary - due to an Adrenal problem and secondary--due to a Pituitary problem. This should be determined for proper treatment.

Now that you are on steroid replacement, it is a little more difficult to establish a diagnosis. With primary Adrenal Insufficiency your ACTH should be high in the morning before taking the prednisone. Since prednisone is fairly long acting, the afternoon dose may suppress your morning ACTH. There is a test known...
as the Cortrosyn Stimulation Test. Cortrosyn is synthetic ACTH and it is given intravenously to stimulate hydrocortisone release from the adrenal if the adrenal is capable of responding. In Addison's disease, there is little or no response. This test is the gold standard to diagnose Adrenal Insufficiency if ACTH levels are not high. There is also a genetic test for one of the enzymes involved in the formation of hydrocortisone which is used if there is doubt about the diagnosis.

If possible, you should see an endocrinologist to confirm the diagnosis. You will have this diagnosis for the rest of your life and it could have significant effects on aspects such as life insurance, health insurance, etc.; as well as proper treatment.

Good luck

Medical Questions and Answers

Dr. Donald Killinger, MD, PhD, FRCPC
Medical Advisor to The Canadian Addison Society

Dr. Killinger will answer your questions about Addison's/Adrenal Insufficiency. Send your question to Dr. Killinger directly from the webpage or this link [http://www.addisonsociety.ca/index.php/education/faqs/ask-a-question](http://www.addisonsociety.ca/index.php/education/faqs/ask-a-question)

By emailing [info@addisonsociety.ca](mailto:info@addisonsociety.ca) or by Canada Post to The Canadian Addison Society, 2 Palace Arch Drive, Etobicoke, ON M9A 2S1

Questions and answers that may be of interest to everyone may be published in the Newsletter and on the website.
To the Newsletter Editor,

My 23-year-old son, David, was married in our backyard on June 6, 2015; beautiful wedding, wonderful couple! Off they moved to Guelph where David began Vet studies at the University of Guelph. It had been a whirlwind year and the summer was the first quiet, down time the young couple had had in years. When we saw David again in September I noticed he seemed to have lost a lot of weight and I encouraged him to get a blood test done. They did not yet have a family doctor and he was very busy with school just underway and so no test was completed.

By October he was thinner still and had started to gag and vomit most days, especially in the mornings. He still avoided the doctor and started to take over the counter meds thinking it was a digestive issue or nerves, or maybe an ulcer. We were all complimenting him on his “great summer tan” which was still obvious to us all.

By November I went down to visit, and he had visited both the Emergency Room and his new Family Doctor. Both believed he maybe had acid issues in his stomach. They prescribed stomach meds that seemed to calm the situation slightly; we felt we were getting somewhere. David still had his “great tan” and I left for Florida thinking he was improving and all was well.

Two weeks later in early December I visited again, and he was dreadfully thin, vomiting many times a day and struggling to attend classes and prepare for his first set of exams. He was light headed, exhausted, and his clothes were huge on his wasted frame. He had pain in his abdomen from the constant vomiting. It was obvious that something was dreadfully wrong with David. We were thinking ulcers, and continued to medicate while trying to get through exams to the holidays so he could rest.

David did complete his exams (unbelievable kid!) and we all met in Toronto on December 22 to attend a play to celebrate his sister’s birthday. When we saw David, I couldn't believe how sick he looked. We had to walk two flights of stairs to our seats and as we got to the last step David quietly said, “I just need to rest a minute”. He went over to the closest wall and slid down the wall coming to rest on the floor! I knew then that this was terribly serious.

By the next afternoon, at our insistence, his original family doctor in Sarnia who had known David his whole life saw David. This doctor diagnosed ulcer and stated that David needed to have a stomach scope done immediately but that this could not be done in Sarnia so close to Christmas without admitting David to hospital. He suggested that David drive back to Guelph, go the ER and they would scope him by the end of the day. By now David is so weak and sick he is unable to drive so his Dad goes with him and drives and off they go back to Guelph.

In Guelph they return to the ER David had been at the previous month and are told four hours later that no scope is available but to return if his symptoms got worse. They feel he is OK and probably just has the flu. Roger (David's dad) is frantic by now and David is just weaker and weaker. Roger later stated that he was afraid to take David home because David was so sick. Roger in desperation piles David back into the car and heads for the Grand River Hospital in Kitchener where he recalls David’s sister had been years before.

As they arrive in the ER at Grand River, the triage nurse looks at David, notices his brown “tanned” appearance and says, “Do you have adrenal issues”? Your colour is unusual so they take him inside. A few hours later they have a diagnosis of Addison’s disease. They hook David up to the IV and administer Cortisol and within an hour he starts to feel better for the first time in months!!! David is admitted to hospital (it is now December 24). We all get to meet Dr. Husein, his new Endocrinologist, and David gets to go home late Christmas day to enjoy his first Christmas with his bride!

We all cried and cried for the rest of the holiday knowing how close to death David had been. Dr.Husein said, had David picked up a bug in his weakened condition undiagnosed that he could have died within hours!

We are forever appreciative to the Triage Nurse who was the first person to recognize David’s situation and set him back on the road to health. The ER physician at Grand River was familiar with Addison’s disease and quickly involved Dr.Husein who continues to monitor David’s situation.

Submitted by David’s Mom
### Surgical Guidelines for Addison’s Disease and other forms of Adrenal Insufficiency

**Potentially Life Threatening Steroid Dependency, Steroids and Saline Requirements for Surgery and Dentistry**

<table>
<thead>
<tr>
<th>Type of procedure</th>
<th>Pre-operative and operative needs (See Note 1)</th>
<th>Post-operative needs (See Note 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lengthy, major surgery with long recovery time</strong></td>
<td>100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)</td>
<td>Continue 100 mg hydrocortisone (Solu-Cortef) IV or IM every 6 hours until able to eat &amp; drink normally (discharged from ICU). Then double oral dose for 48+ hours. Then taper the return to normal dose.</td>
</tr>
<tr>
<td>eg. open heart surgery, major bowel surgery, procedures needing ICU</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Major surgery with rapid recovery</strong></td>
<td>100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)</td>
<td>Continue 100 mg hydrocortisone (Solu-Cortef) IV or IM every 6 hours for 24 - 48 hours (or until eating &amp; drinking normally). Then double oral dose for 24 - 48 hours. Then return to normal dose.</td>
</tr>
<tr>
<td>eg. caesarean section, joint replacement</td>
<td></td>
<td></td>
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<tr>
<td><strong>Labour and vaginal birth</strong></td>
<td>100 mg hydrocortisone (Solu-Cortef) IV or IM at onset of labour then 6 hourly until delivery.</td>
<td>Double oral dose for 24 - 48 hours after delivery. If well, then return to normal dose.</td>
</tr>
<tr>
<td><strong>Minor surgery</strong></td>
<td>100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)</td>
<td>Double dose oral medication for 24 hours. Then return to normal dose.</td>
</tr>
<tr>
<td>eg. cataract surgery, hernia repairs, laparoscopy with local anaesthetic</td>
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<td></td>
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<tr>
<td><strong>Invasive bowel procedures requiring laxatives</strong></td>
<td>Hospital admission overnight with IV fluids and 100 mg hydrocortisone (Solu-Cortef) IV or IM during purgative stages of preparation. 100 mg hydrocortisone IM just before commencing.</td>
<td>Double dose oral medication for 24 hours. Then return to normal dose.</td>
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<tr>
<td>eg. colonoscopy, barium enema</td>
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<td></td>
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<tr>
<td><strong>Other invasive procedures</strong></td>
<td>100 mg hydrocortisone (Solu-Cortef) IV or IM just before commencing.</td>
<td>Double dose oral medication for 24 hours. Then return to normal dose.</td>
</tr>
<tr>
<td>eg. endoscopy, gastroscopy</td>
<td></td>
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<tr>
<td><strong>Minor procedure</strong></td>
<td>Not usually required.</td>
<td>An extra dose only whe hypoadrenal symptoms occur afterwards.</td>
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<tr>
<td>eg. skin mole removal with local anaesthetic</td>
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<tr>
<td><strong>Major dental surgery</strong></td>
<td>100 mg hydrocortisone (Solu-Cortef) IV or IM just before anaesthesia. (See Note 3)</td>
<td>Double dose oral medication for 24 hours. Then return to normal dose.</td>
</tr>
<tr>
<td>eg. dental extraction with general anaesthetic</td>
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<tr>
<td><strong>Dental surgery</strong></td>
<td>Double dose (up to 20 mg hydrocortisone) one hour prior to surgery.</td>
<td>Double dose oral medication for 24 hours. Then return to normal dose.</td>
</tr>
<tr>
<td>eg. root canal work with local anaesthetic</td>
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<td></td>
</tr>
<tr>
<td><strong>Minor dental procedure</strong></td>
<td>Not usually required.</td>
<td>An extra dose where hypoadrenal symptoms occur afterwards.</td>
</tr>
<tr>
<td>eg. replace filling</td>
<td></td>
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</tbody>
</table>

**NOTES:**

1. For any nil-by-mouth regimen, please arrange an intravenous saline infusion to prevent dehydration and maintain mineralocorticoid stability, eg. 1000 mL every 8 hours if >50 kg.
2. Please administer bolus hydrocortisone over a minimum of 10 minutes to prevent vascular damage.
3. Monitor electrolytes and blood pressure post-operatively for all procedures requiring steroid cover. If the patient becomes hypotensive, drowsy, or peripherally shut down, administer 100 mg hydrocortisone IV or IM immediately.
4. If any post-operative complications arise, eg. fever, delay the return to normal dose.
5. Please ensure back-up supplies of oral and injectable hydrocortisone are available for resuscitation before commencing surgery. Even at full steroid cover, post-operative resuscitation may occasionally be required.

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This chart is based on the UK ADSHG (Addison’s Disease Self Help Group) published information. It is reproduced here for the education of patients and information for Medical Doctors in Canada.

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