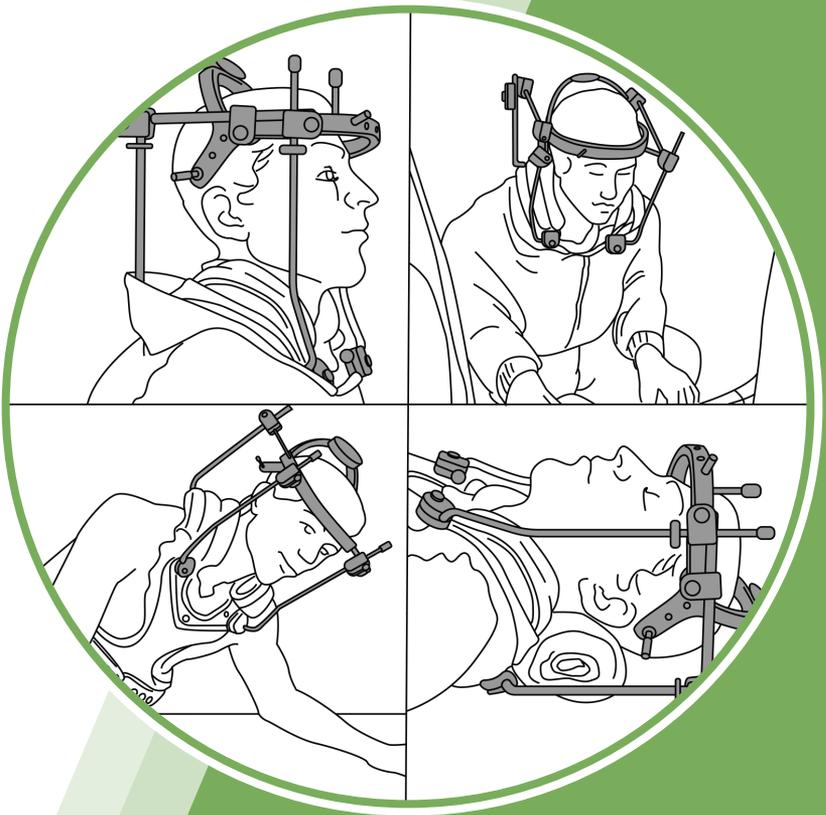


YOUR GUIDE TO WEARING YOUR HALO VEST



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NOTICE!

Although the information presented in this booklet is the best currently available, it is intended for the general guidance only!

Each person's injury and condition is different. Some information presented here may be dangerous to you. Your physician must review recommendations in this booklet to see if they are appropriate for your particular injury and condition. The space below is for your physician to use to write specific orders for your care. Remember, only your physician knows your condition well enough to make specific recommendations.

SPECIFIC ORDERS FOR:

Patient's Name: _____

ACKNOWLEDGEMENTS

The information in this guide has come from the experiences of many hundreds of patients, the physicians and nurses in Canada's leading spinal injury units. We extend our thanks to all of these people who are helping to make the way a bit easier for spinal injury patients in the future.

Most especially we wish to acknowledge the direct contributions of Virginia Edmonds, R.N. Program Manager, Neurosurgery, Joanne Marr, R.N.M.Sc.N. Clinical Nurse Specialist, both of the Toronto Western Hospital, Gillian Bradbury, R.N., B.Sc.N., Nursing Manager, Neuro. I.C.U., Toronto General Hospital, and Kathi Colwell, R.N. Co-ordinator A.S.C.I.U. of Sunnybrook Hospital, Toronto.

_____, M.D.

INTRODUCTION

You have a dislocation or fracture of one or more bones in your neck (vertebrae). You are fitted with a Halo and vest to hold your neck in place while it is healing. The healing process usually takes 8 to 12 weeks, but you will probably be discharged home after a few days. If you require surgery, you may stay in the hospital longer. While you are at home you and/or members of your family will be responsible for taking care of your Halo vest.

This booklet will assist you by outlining some of the Do's and Don'ts of living with a Halo vest. We wish you a speedy recovery!

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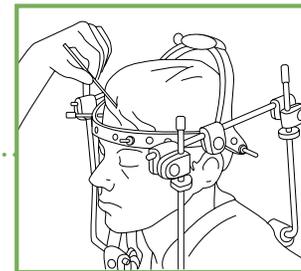
CARE OF THE VEST

Before you go home be sure your vest fits you comfortably. Each vest comes with extra fleece you can insert to relieve any pressure points or edges that “dig-in” when you sit or move in certain positions. Above all, DO NOT attempt to loosen or adjust your vest by yourself. Any adjustments must be made by medical staff.

Keep your vest dry at all times. If you should get the liner wet, you can dry it by using a regular hair dryer on a “cool” setting for about 45 minutes or until dry. Frequent wetting of the lining of your vest will cause it to mat. It may even damage your skin and cause infections.

PIN CARE

Pin Care should be carried out at least once a day with assistance of a family member or visiting nurse. Areas around your pins are cleansed with soap and water. Cleaning can be done with shampoo on days when you are washing your hair. Any crusting (scabbing) you observe should be removed with hydrogen peroxide solution or alcohol and a Q-tip. If peroxide or alcohol ‘burns’ remove it with soapy water.



DO NOT use any ointments or antiseptics on your pin site unless they are prescribed by a physician for an infection. An infected pin will probably be removed and replaced by a new pin in another site. Your skull pins will be tightened while you are in the hospital and just before you go home. Thereafter, they will be tightened regularly or as necessary in the physician's office or clinic. If you observe an inflamed pin site, shifting of the pin, experience pain or observe an open area at the pin sites, call your physician's office. These signs, or a “clicking” sensation at the pins are signs of a loose pin which needs prompt attention. If pins are left loose, the Halo ring can slip off!

WE WISH YOU A SPEEDY RECOVERY!

ACTIVITY

For the first few days after your Halo vest has been applied you will probably feel awkward and top heavy and frequently bump into furniture, doorways, cupboard doors, etc. This will decrease as you become accustomed to your new way of moving. Despite the Halo vest it is very important that you carry on as much as possible with your daily activities. It is also important for your mental well-being that you do not “go into hiding” and stay at home for the next 2 or 3 months. This can be very depressing and boring for you. It will also make the time seem much longer.

Of course, when you go out you should be prepared for comments because the Halo apparatus is rather strange looking and may well gain attention. But do persist and you will find that most people are quite courteous and kind. Some people who have worn Halos have even commented that they missed the special attention after their Halos were removed. You can go out to dinner, movies, a walk, parties, etc. as you did before your accident. Remember, one purpose of having a Halo is to keep you as active as possible. You must avoid all activities involving heavy lifting, jumping or running. If you are employed at a job that does not require a lot of physical activity or any lifting and you feel well enough you should

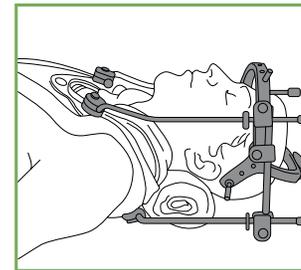
be able to return to work, at least part time, or return to school. Be sure to check with your physician before returning to work or school. If you find that your neck starts to hurt after you have been active for a while, stop and rest.

You will experience this more during initial stages of wearing the Halo vest than later. If neck pain persists or you experience any change in the feeling or movement in your arms or legs, notify your doctor IMMEDIATELY.

THE HALO ALLOWS YOU TO KEEP AS ACTIVE AS POSSIBLE

SLEEP

While wearing the Halo vest you will probably notice that you seem to require more sleep than before. You may not sleep well at night and you may require naps during the days as well. You may wake up every time you turn at night, at least initially, and it may not be easy to find a comfortable position for more than a few minutes. However, this phase passes with time as you get more used to the Halo.



SLEEPING WITH ROLLED TOWEL

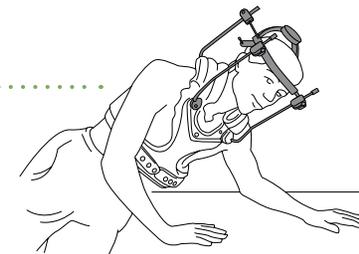
When your Halo is first put on you will not be accustomed to having your head suspended. Putting a rolled towel or pillowcase between your head and the back of your neck (when on your back) or next to your cheek (when on your side) will help you feel more normal. It is important,

however, that the towel or pillowcase does not apply pressure. Sleeping with the head of your bed or mattress slightly elevated may help you become more comfortable.

You can even sleep on your stomach, if you want, by putting a pillow or blanket at your chest and another at the front of your Halo ring so your nose is not pressed into the mattress. You may also notice when you wake up in the morning that you feel quite stiff. This will improve with time.

GETTING UP

When getting out of bed, it is important NOT to try to sit straight up, bending from the waist. This puts great stress on your front pins. Get up by rolling up onto your side at the edge of the bed, drop your legs off the edge and push sideways with your elbow and hand at the same time.

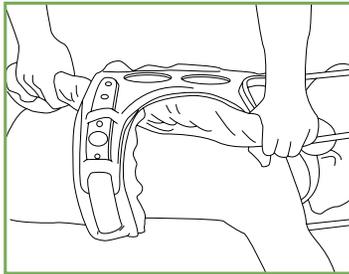
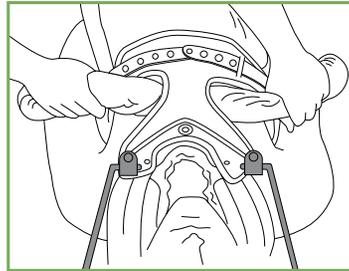


SKIN CARE

It is most important to keep your skin and liner as clean as possible since the liner should not be changed unless it is medically necessary.

BATHING

Bathing while wearing a Halo vest can be awkward until you establish a routine. To wash your body under the vest use a bath towel that has been wrung out in hot water. Pull it back and forth in a drying motion beneath both front and back portions of the vest by pulling ends of the towel back and forth. A towel moistened with alcohol may be used in the same way every 2 to 3 days to clean and dry the skin under the vest.



Remember – No soap, lotion or powder should be used under the vest! All of these things may irritate your skin.

NO SOAP, NO LOTION, NO POWDER



If you feel pressure points under the vest or if your condition has caused a loss of feeling in certain parts of your upper body, have a family member or visiting nurse inspect your skin by looking under the vest with a flashlight while this area of your body is being cleaned. If there are any reddened areas, call your doctor's office.

NOW FOR THE REST OF YOUR BODY!

Showering should never be attempted because it is impossible to do without getting the vest liner wet. You can either take sponge baths or run 2-3 inches of water in the tub (as long as the water level is below your vest) and sit in it to wash.

Sitting in a tub seems more like having a real bath, but you must take care that the bottom of your vest is protected with plastic. When washing around your arms it is advisable to protect this area of your vest as well, and bending over towards the arm being washed helps prevent water from running down into the vest. Be sure to have a non-slip surface in the tub to prevent any possibility of a fall. A hand rail on the wall is also very useful.

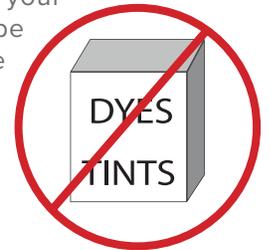
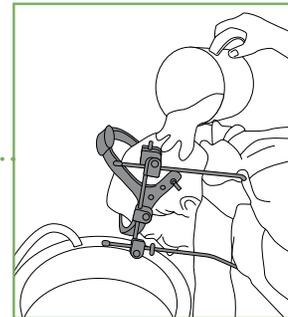
SHAMPOOING YOUR HAIR

Your hair should be shampooed regularly. The shoulder of the vest should be protected with plastic. This can most easily be done with the help of an assistant. You can kneel beside the bathtub and bend forward with your head over the tub until your head is lower than your shoulders, if possible.

You can also do this over your kitchen sink and rinse with a sprayer or by pouring water over your head taking care not to get the vest wet. Your assistant can shampoo your hair using a flexible hose to rinse. If this position is too difficult for you, you can lie across two chairs (or on a cot, if you have one) with the Halo suspended beyond the chair. The water can then run into the tub, or if your bathroom is too small, you can run the water into a pail or a large plastic bag held in place under your shoulders.

NO DYES OR TINTS

Some people develop dandruff or a dry scalp while in a Halo vest. Changing shampoo usually helps. This problem disappears when the Halo ring is removed. Remember while washing your hair your pin sites should be inspected. While the pins are in place you should not use any tints, dyes, sprays or conditioners on your hair.

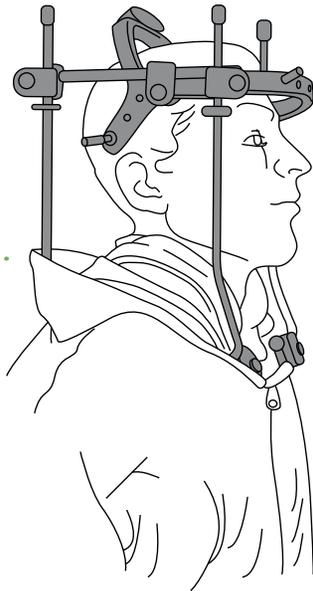


CLOTHING

Wearing clothing while in a Halo vest is of prime concern for appearance as well as warmth. Since the vest will be in place for approximately three months, some clothing alterations need to be considered. Attire such as pants or skirts should present no problem as the bottom of the vest ends above the waist. However, adapting clothes to fit under and around your vest and especially the bars can be a challenge. Unless you are scheduled to wear your vest during more than one season, you will probably find that three or four outfits of altered clothing is adequate.

FOOTWEAR

Shoes or boots should be low-heeled with traction soles to avoid slipping especially when you are outside. Sneakers are great in the summer. Women should never wear high-heeled shoes because they change your balance and increase your chances of slipping and falling. They may also make your back hurt.



UNDER YOUR VEST

In the summer when the liner of your vest tends to become hot, cotton undershirts or T-shirts can be worn beneath the vest. The shoulder straps of the undershirt can be cut and the seams of the T-shirt can be split from the neck to the armholes. The top is then pulled up from the bottom of the vest and then refastened using pins, Velcro™, buttons or snaps. Women can wear bras by slipping a larger size under the front of the vest between the breasts and fastening the straps on the outside of the vest in the back. An elasticized halter top also works well for this purpose. Many women simply prefer to go bra-less.

OVER YOUR VEST

If the weather is warm but you prefer to wear clothing over the vest, consider using regular cotton shirts or blouses, in one or two sizes larger and adapting them (see page 6). They can also be worn by buttoning them as high as possible and tying the tails in a knot, for summer, or tuck in the flannel shirt for winter. T-shirts with elasticized tops are also quite versatile. One of the most popular outfits for both men and women, especially in the spring and fall, is a jogging suit with a front-zippered jacket. Outer wear in winter time can be a bit more difficult. A winter coat in one or two sizes larger than normal (borrow if you can) or a cape work quite well. A scarf pulled up high over your head is quite adequate. You will probably need a second scarf to wrap around your neck.

THE MOST POPULAR OUTFIT TO WEAR IS A JOGGING SUIT.

DIET

Wearing a Halo can be quite tiring, and you can burn a lot of calories just carrying it around. So if you stick to your normal diet you may well lose a small amount of weight. It is certainly not advisable to gain a lot of weight because your vest will not fit properly. Normal fluctuations will not make any difference to the fit of your vest. Should you either gain or lose a great deal of weight you will have to come into the hospital and have the vest changed, because this could affect the stability of the apparatus, your skin care and possibly your breathing. A regular diet of normal size portions with lots of protein and milk or milk products is all that is required to help with the healing process.

SEXUAL ACTIVITY

Sexual activity can be carried out during the time you have the Halo vest, but it will probably have to be modified. The Halo apparatus, especially the rods, were not designed for close contact, even hugging, so allowances must have to be made for this. You will probably want to try different positions in order to have sex with some degree of comfort, although some positions are safer for your partner than others. A side-lying position is probably most comfortable for both of you or you may lie on your back and assume a passive role. If other positions are used you might find that putting a small pillow between you will keep your rods from injuring your partner. If your neck injury has been particularly difficult to realign or hold in position, your doctor may recommend that you abstain from sexual activity until the six or eight week mark is reached. Experiment within reason but you both must be careful, gentle and tolerant. When kissing you must be careful not to bump the other person's head with your Halo ring or pins. Remember it is easy to misjudge distances between an object and your Halo ring until you have become accustomed to wearing it.

TRAVEL

Wearing a Halo vest does not necessarily have to restrict local traveling but it is safer and more convenient if you have a companion. Traveling in cars does not pose a problem especially if the car is large. Larger cars are easier to get in and out of and have a smoother ride than small ones. To get into the car, back into the seat with your body bent forward, then swing your legs around. To get out, just reverse the process. Always wear a seatbelt!

Do not attempt to drive yourself because while you are wearing the Halo and cannot turn your head, you are considered to be an impaired driver and could cause an accident or get a ticket! Do not use any two-wheeled vehicles such as a bicycle as balance is difficult in a Halo and the danger of falling is too great.

You can ride in an airplane with no problem. The airlines will let you pre-board which you will find very convenient. Just a note of warning-you will set off the metal detector alarms at the airport.

Trains, subways and buses can be a bit more difficult because they can shake quite a bit and you are not assured of a seat when you get on. The shaking (vibration) travels up your body to your pins and can be felt in your skull if you have to sit or lean against a hard surface. This can be an unpleasant feeling. What may be worse, however, may be the pushing and shoving one experiences in a crowd. Do try to travel at times when the crowds have thinned out.

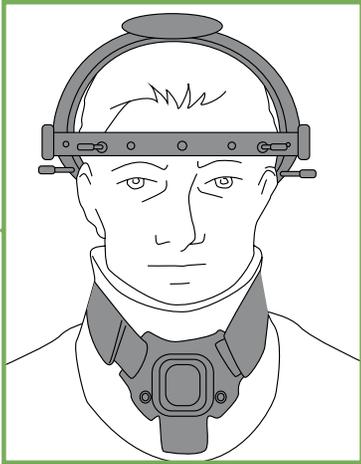
DO NOT ATTEMPT TO DRIVE YOURSELF!



HALO REMOVAL

Usually, two or three months after the Halo vest is applied, the Halo ring, skull pins and vest are removed by the physicians once x-rays have confirmed that your neck is healed. To reduce scarring, a peroxide saturated gauze may be used to massage the pin sites above your eyebrows to break the adhesions which have formed between the skin and the bone. This procedure is done to reduce scarring on your forehead after healing. After you go home you should continue to move the skin over the pin holes for a period of several days to avoid reattachment of the adhesions.

Adhesive bandages may be used over the pin holes only if you are going to be in a dirty environment. Otherwise they should be left open to the air at all times. The pin holes at the back of your head need only to be kept clean by washing with soap and water or by shampooing and need not be bandaged at any time.



COLLAR SUPPORT

When the Halo is removed all the weight of your head is on your neck again. Because the muscles in your neck have not done any work for many weeks, your head will feel very heavy and your neck very wobbly. You will be fitted with a collar to support your neck which will be worn for the next several weeks. After the collar comes off, your doctor may recommend that you attend physical therapy, sessions to strengthen your neck muscles and might suggest certain activities such as swimming. It will still be several

weeks before you are feeling normal again, but you will notice gradual improvement every day. You should continue to restrict your activities during this time as you did while you were wearing the Halo. Your doctor will advise you when it is safe to return to contact sports, jogging, weightlifting, etc. It will depend on how well your neck has healed.



**Available from Anjon Holdings
in these languages:**

English, French, German,
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