What Women Need to Know about Aging with SCI

by Laura Mosqueda, M.D.

Women who have a spinal cord injury (SCI) need to prepare for the future when thinking about health care. Many people with SCI, as well as their physicians, operate in the “acute” mode. In other words they deal with problems and issues as they arise. Not enough people make plans for a healthy future. Thanks to better health care, self-advocacy and improved social programs a woman with SCI must plan to live into old age.

Thinking about the future means thinking about preventive health. This is important to all women regardless of disability status, but it is very important for women with SCI to be aware of their special health concerns. There are several types of preventive health care. Primary prevention refers to ways that may stop a person from getting a disease. An example of this is immunization for influenza, or flu shot. It is designed to actually prevent people from getting the flu. Secondary prevention refers to ways that may help doctors detect a treatable disease at an early stage, before it becomes a serious problem. An example of this is a mammogram. It will not prevent breast cancer, but mammograms can detect breast cancer at an early stage so that it may be successfully treated.

Immunizations

It is certainly important for everyone with SCI to remain up-to-date on immunizations. This includes the flu shot every year and tetanus shot every 10 years. It is also important for people with SCI to get a shot for protection against a particular type of pneumonia (pneumococcal pneumonia). Many physicians think that this protection is for the elderly or people with lung disease, but people with SCI need to remind their doctor that they, too, are at risk for pneumonia. This is because of the weakened respiratory function that occurs after injury.

Pap Smears

Pap smears are used to detect cancer of the cervix. They may even detect changes in cells before they turn into...
Women

Women are at higher risk of developing cervical cancer than others. Women who began having sexual intercourse at an early age and/or who have multiple sexual partners are at a higher risk. Women at higher risk should be screened every two years. Those women who are sexually active but not at high risk should be screened every three years if they have already had two or three normal smears. After the age of 65, further screening is not needed unless high-risk behavior, such as multiple sexual partners, continues. Also, women who have undergone a hysterectomy (the surgical removal of the uterus) do not need to be screened unless the surgery was performed because of cervical cancer.

Women with spinal cord injury may need to plan ahead for the Pap smear. Some doctors’ offices and rehabilitation facilities may be accessible and have adjustable examination tables. But most offices are not easily accessible. Some are not accessible at all! It can be a challenge for women with SCI to find an accessible office. There can be problems with transferring on and off the examination table. It may be difficult maintaining the proper position for the Pap smear. Women can help by taking an active role in guiding the physician and office staff in the best methods for assisting with transfers, positioning, and techniques for a more comfortable exam.

Mammograms

It is important to make the same accessibility preparations when getting a mammogram. There is a lot of controversy over the appropriate screening guidelines for mammograms. Most agencies agree that all women between the ages of 50 and 69 years should be screened once a year. Some doctors encourage women to have their first mammogram at age 40.

There are some factors to consider that may increase a woman’s risk of breast cancer:

1. a history of breast cancer in a first-degree relative (a mother or sister), particularly if the cancer developed before menopause;
2. having no children or having the first child at an older age; and
3. certain types of benign (non-cancerous) breast disease that can be seen on a mammogram.

Some women with SCI have limited use of their hands. This can make breast self-examinations difficult. It is even more important that women with this difficulty have regular breast exams and mammograms as a routine part of their health care plan.

Osteoporosis

All women will experience a gradual loss of bone density after the age of 30. At the time of menopause, there is a rather sudden increase in the loss of bone density. This may cause some women to develop osteoporosis. Osteoporosis is a disease that thins and weakens bones to the point where they break easily - especially bones in the hip, spine, and wrist.

Women with spinal cord injury need to be especially cautious in preventing and treating low bone density. For the first few months following injury, there is a loss of bone density in many parts of the skeleton. This loss is due in part to the body’s inability to bear weight on some bones. If a woman has a spinal cord injury at the age of 25, what will happen when she turns 50 and experiences menopause? There may be another dramatic loss of bone. This puts women with SCI at an even higher risk of breaking a bone.

Osteoporosis is related to a lack of estrogen and may be prevented by taking estrogen, a hormone replacement therapy. The issue of hormone replacement therapy and prevention of osteoporosis is something that women with SCI need to discuss with their doctor.

Conclusion

It is important for women with spinal cord injury to develop a partnership with their doctor and plan for a healthy future. Remind your doctor to treat health care issues that may be neglected in the acute setting. Make sure to practice primary and secondary prevention of conditions by getting regular immunizations, Pap smears and mammograms. Finally, talk with your doctor about what you can do to reduce the affects of osteoporosis.

Remember, better health care today can mean better health tomorrow.

Note

Laura Mosqueda, MD is Director of Geriatrics and Associate Professor of Clinical Family Medicine, University of California, Irvine College of Medicine. She is Co-Director of the Rehabilitation Research and Training Center on Aging with A Disability, Rancho Los Amigos Medical Center, Downey, CA. This work was supported by the National Institute on Disability and Rehabilitation Research, US Dept of Education grant #H133B980024.

1 http://www.nih.gov/nia/health/pubpub/osteo.htm
HEALTHY LIVING

Getting older with spinal cord injury

Q Now that I’m in my 40s, do I need to be more careful with my skin to prevent pressure sores, even though I have not had any skin problems for the last 24 years?

A Yes! Everyone ages, and we all lose moisture, elasticity and pliability in our skin. Our skin becomes droopy, wrinkly and more fragile. No matter if you are injured later in life, say at age 40, 50, or been injured for 20 years or more, it is likely that your skin and muscle are not providing you with the same padding as when you were younger. It makes you much more prone to skin problems.

But you can help yourself reduce the chances of having skin problems. You can do more pressure releases, make adjustments to your wheelchair to help with seating and posture, or try a different type of cushion. You can drink more water to improve moisture and eat a healthy diet that includes a daily vitamin supplement. You can also avoid smoking because it makes the skin more prone to damage.

As I get older, what are some of the early signs that may indicate I need to consider replacing my manual wheelchair with a power chair?

A Most people are reluctant to switch from a manual wheelchair to a power chair. The switch is often seen as the start of what is presumed to be a loss of independence.

However, joint problems are likely to be the first sign that you need to switch to a power chair. Pushing a chair puts a lot of stress on the wrists, elbows and shoulders. These joints are not made for this type of daily grind. Eventually, the stress will most likely lead to pain in the joints as well as decreased mobility. If you continue to push a chair after joint problems begin, the pain and wear and tear on the joints increases.

Actually, the continued stress on joints when pushing a manual wheelchair can result in more of a loss of independence as you get older. The added damage can severely effect the range-of-motion in your joints and muscles. So when you begin to have joint problems, it may be better for you over time to switch from a manual chair to a power chair.

Another early sign to consider is fatigue. When you find that you are unable to go the same distance that you once did because you are getting tired, you may want to consider moving to a power chair.

Q What is the leading cause of death for persons with SCI of more than 20 years? Is it different from the “normal” population?

A I know of only one study* published in 1993 that documents the causes of death among persons with SCI whose length of survival is greater than 20 years. It is a study of veterans that used data collected between 1940 and 1987. The results from this study were that diseases of the circulatory system, like heart disease, are the leading cause of death among individuals living 21 years after SCI and longer. The Center for Disease Control and Prevention also (CDC) reports that heart disease is by far the leading cause of death among all persons in the United States, regardless of whether they have SCI.

However, your current age is generally more important when assessing life expectancy and causes of death than how long ago your injury occurred. You should also consider your level of injury, whether or not you are ventilator dependent, and whether or not your injury is complete or incomplete. All of these factors can influence your life expectancy and eventual cause of death. For example, a 20 year old person with a complete injury at the C-4 level tends to die from different causes than a 60 year old person with an incomplete injury at the T-10 level, even when the years after injury are the same.

There is one other thing to consider. According to the National Spinal Cord Injury Statistical Center, respiratory complications are now the most common causes of death following SCI.

Note

It is a fact. More people are living longer now than at any time in history. Improvements in health care have practically doubled the average life expectancy over the past 100 years. The medical community has learned a lot from past research on the affects of aging, and it continues to be a very hot topic for researchers.

Aging is also an important topic for individuals with spinal cord injury (SCI). After all, you are living longer too. Research in SCI has helped improve the short and long term treatment and care. People with SCI are now living into their 60s, 70s and even longer. This means that you must prepare for getting older like everyone else. Not only do you need to know about the normal processes of aging that everyone faces, but you also need to prepare for the unique issues of aging with SCI.

### Osteoporosis

Osteoporosis is a disease that thins and weakens bones to the point where they break easily - especially bones in the hip, spine, and wrist. Osteoporosis occurs in almost everyone who ages. Older women who have gone through menopause usually have many more problems with osteoporosis than men: one out of two women and one out of eight men in the general population over the age of 50 will have a bone fracture as a result of osteoporosis.

Individuals with SCI have other risk factors associated with osteoporosis to consider(17,199),(971,886). Regardless of your age or your sex, your bones lose minerals and become less dense soon after injury. This loss may continue over the first few years after injury. It will then usually level off. Most people with SCI will eventually lose about 50% of bone density after injury. This may sound extreme, but it is not probably going to put you at risk for osteoporosis related bone fractures. Your risk will increase if additional bone density loss occurs. This can be a problem for women. For more information women with SCI should read the feature article page 1, What Women Need to Know about Aging with SCI. Overall, between 1 and 6% of all individuals with SCI will have a fracture related to osteoporosis.

You can help prevent osteoporosis by eating a healthy diet, not smoking and limiting your alcohol and caffeine use. Functional Electrical Stimulation (FES) may help to reverse osteoporosis. Some doctors believe that standing, or bearing weight on the bones, may also help to prevent bone loss. Other doctors do not think it is possible to stand long enough to make a difference in bone loss. Muscle spasms can also help prevent osteoporosis if they are not strong enough to cause fractures.

### Arthritis

Arthritis has over 100 different forms and many symptoms. Arthritis usually causes pain and loss of movement in the joints of the body. It can occur over a long period of time and can cause swelling, redness pain and stiffness. In the general population arthritis occurs in one out of seven people and in about half of all people age 65 and older.

People with SCI need to consider other problems related to arthritis. Accelerated degenerative arthritis can occur in the spine between two vertebrae. This may occur because of poor posture and/or stress on the spine. Other arthritis type problems include degenerative cartilage in bone and soft tissue damage. Carpal Tunnel Syndrome (CTS) can occur in the hand. Pain, burning, numbness and tingling in the wrist, hand, arm, and neck are symptoms of CTS. These problems are complicated because of the continual use of a manual wheelchair. The joints in your shoulders, arms, and hands are not made for years of daily activities performed by persons with SCI.

One way for individuals with SCI to help prevent arthritis involves activity modification. Try to avoid the activities that aggravate the pain and other symptoms. You may also talk to your doctor about other treatment options that are available.

### Urinary System

The urinary system has three major functions. It makes urine in the kidneys; stores urine in the bladder; and removes urine from the body through the urethra. Urinary incontinence is the most common problem of the urinary system among people aging in the general population. Incontinence is the loss of bladder control, or the leakage of urine. One of the most common types of incontinence is “Stress Incontinence.” This is when leakage occurs during exercise, laughing, lifting, or other activities that put stress on the bladder. Some form of incontinence happens in at least one out of ten people age 65 and older.
There is also some evidence suggesting that people in the general population with more than two or three urinary tract infections (UTIs) in a lifetime have an added risk of bladder cancer.

Aging can have a big influence on the urinary system after SCI. People with SCI are technically incontinent because of the lose of bladder control after injury. This incontinence can lead to skin problems if the leakage is not controlled through effective bladder management. People with some bladder control may have less control as they age. There is also an increased risk of UTI’s. In fact, one of the leading causes of death for individuals with SCI is renal failure. In addition, the risk of bladder cancer for people with SCI is about two times greater than the general population.

People with SCI using an indwelling catheter for bladder management may have other problems. Prolonged use of an indwelling catheter by a women may result in urine leakage because the catheter can enlarge the urethra. There may be a greater increase in the risk of bladder cancer. Some research suggests that use of an indwelling catheter can make you three to four times more likely to develop bladder cancer. Should you be alarmed? Maybe not when you look at the big picture. Your risk of bladder cancer is still relatively small. You have about a 10% risk of bladder cancer after thirty years of indwelling catheterization.

Individuals with SCI can help prevent problems by having a regular check-up that includes a renal scan. Tell your doctor about any problems you are having. This will help guard against renal failure. Drink plenty of water to help reduce UTIs. If possible use something other than an indwelling catheter as your method of bladder management.

Individuals aging with SCI can also take longer with bowel movements. You may find that your bowel program takes two hours to complete compared to only thirty minutes 15 years ago. This may be a normal decline of function. Many doctors also believe that the repeated use of laxatives, which is common with spinal cord injury, is a factor in problems with the regularity of your bowel program.

If you feel that you have a problem with your bowel program, talk with your doctor about treatment options. Your problem may be a result of a poor diet, misuse of laxatives, or lack of physical activities. You may consider having a colostomy. This is probably not an appealing option for some people, but it can benefit people with decreased mobility and/or people who are having difficulty with bowel management.

**Skin**

Everyone's skin changes over time. Ultraviolet light from the sun damages the skin over time, and the skin naturally changes with age. Skin begins to sag, stretch, and lose its ability to “snap back” when stretched. Everyone's skin begins to wrinkle, dry out, and show other signs of aging. Individuals aging with SCI can also experience changes in skin. The skin may become thinner and less elastic. It may also become more sensitive to sunlight.

**Gastrointestinal System**

As people get older, changes in bowel function can occur. People are more likely to develop constipation later in life. Constipation is defined as having fewer bowel movements than usual, with a long or hard passing of stools. Many people worry that they are constipated because their bowel movements are not "usual" when compared to when they were young. However, older people in the general population may not need to worry. There is no “right” number of bowel movements in a week. An older individual can be “regular” with twice a day or twice a week bowel movements. Answering "yes" to the following questions is a warning sign for constipation.

1. Do you often have fewer than three bowel movements each week?
2. Do you often have a hard time passing stools?
3. Is there pain?
4. Are there other problems such as bleeding?

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**Note**

Much of the information from this article came from The Challenge of Successful Aging: Factors that can make a Difference in Longer Life by Daniel P. Lammertse, MD, SCI/Life, 1998. Dr. Lammertse was the featured speaker at the UAB RRTC Teleconference on Aging with SCI. A summary transcript of the event is available at www.spinalcord.uab.edu/show.asp?durki=25829.

**Additional Resources** for this article include:
- [http://www.craighospital.org/](http://www.craighospital.org/)
Perhaps because only 20% of individuals with spinal cord injury (SCI) are women, information on specific gynecological, menopausal, sexual, and obstetrical concerns have evolved slowly. This is Part 1 of 2 updates on a self-reported study documenting these unique reproductive health concerns. 472 women with SCI were interviewed. The average age of those interviewed was 40, and their average age at the time of injury was 32. Participants in the study were demographically similar to the previously published data on age of injury, level of injury, extent of injury and bladder management methods after SCI.

**Gynecological Experiences**

**Hysterectomies:** History taken showed the number of women having a hysterectomy was 8% pre-injury and 7% post-injury. Only uterine fibroids, uterine cancer, dysfunctional uterine bleeding and endometriosis were instances for hysterectomies both pre- and post-injury. Hysterectomies for birth control/sterilization (10.8%), severe cervical displasia (5.4%), and/or mobility limitations for menstrual management (2.7%) were indicated in women with SCI only.

**Urinary Tract Infection (UTI):** Reported problems by all women pre- and post-injury showed an expected increase in UTIs post-injury. Women with SCI also reported having more vaginal yeast infections than before injury.

**Menstrual Cycle:** The average length of cycle and length of menstruation differed only slightly among women pre- and post-injury. No difference in quantity of menses was evident. Menstrual cramping was more common prior to injury. Following injury, pre-menstrual syndrome and excessive gain of water weight with bloating and lower extremity swelling were more common. Excluding cramping, complaints were more common post-injury. Almost 25% of all women had increased autonomic symptoms (i.e., sweating, headaches, flushing, or goose flush), bladder spasms and muscle spasms.

**Preventive Health and Wellness Practices:** Only 14% reported having no Pap smears post-injury compared to 19% pre-injury. However, women did not get Pap smears as regularly (i.e., annually) after injury. All women who had Pap smears reported similar results pre- and post-injury. 63% of women reported not getting a mammogram post-injury. 20% of women with SCI reported no physician/nurse directed breast examinations compared to 30% pre-injury. 59% of women reported performing breast self-examination pre-injury compared to 61% post-injury. However, only half in the latter group reported regular, monthly self-examinations.

**Menopausal Issues**

At the time of injury, 9.9% of women who had not had hysterectomies reported previously experiencing menopause. Interestingly, 7.9% reported menstruation prior to injury but had permanent cessation of menses at the time of SCI. In addition, 9.7% of women underwent menopause between one-year post-injury and the date of the interview. Therefore, a total of 14.6% underwent permanent cessation of menstruation (menopause) after injury. Women who underwent menopause pre-injury averaged 45.5 years of age whereas women undergoing cessation of menses post-injury averaged 43.3 years. No significant difference was noted in any menopausal symptom being more likely at a particular time. However, mood disorders were reported more frequently post-injury as were SCI related conditions such as spasticity, autonomic dysreflexia and bladder spasms. Although infrequently used, half of the women on hormone replacement therapy reported no easing of menopausal symptoms.

New bone fractures after menopause were reported in 2.8% of women prior to injury compared to 4.4% post-injury. 30% of the postmenopausal women had new fractures if they had had a spinal cord injury prior to menopause.

**Conclusion**

This study serves as a description of the unique reproductive health concerns of women pre- and post-injury. Although complete consequences and effects of injury are still unknown, some gynecological health concerns may be more problematic for women with spinal cord injury.


*Part 2 of this study will appear in the next Research Update and will include sexual and obstetrical issues.
Aging. People who smoke can have more severe signs of aging because smoking prevents normal blood flow to the skin. The risk of skin cancer also increases as all people get older. The risk is greater for people who smoke and those with added exposure to the sun.

People with SCI must be increasingly aware of the impact of skin change. Anything that relieves pressure will help prevent pressure sores. Increase your pressure releases. Standing upright with the help of assistive devices and/or lying on your stomach are options as you get older. Increasing the humidity in your home and using lotion on your skin may help prevent your skin from drying out. You can help your skin by not smoking and limiting the exposure of your skin to the sun’s ultraviolet light. Finally, check your skin everyday and watch for dryness and/or redness. If you begin to see problems with your skin, talk with your doctor about ways to better protect your skin.

Alcohol Abuse

At least 10-15% of Americans age 55 and older abuse alcohol. This is a problem that is too often overlooked. Many people may begin as "social" drinkers, but it develops into alcohol abuse later in life because of "situational" factors. These factors include retirement, failing health, financial problems, and/or loneliness due to isolation after death of friends or loved ones. It is believed that as people get older they become less able to handle the consumption of alcohol. Alcohol slows down brain activity and affects alertness, coordination, and judgment. These impairments can lead to accidents. Continual abuse of alcohol can damage the brain, liver, kidneys, stomach and heart.

Individuals with SCI abuse alcohol at more than twice the rate of the general population. This means that at least 20-30% of persons with SCI abuse alcohol. The increase in risk of abuse may be the result of underemployment, unemployment, health problems, loss of mobility, decrease in or loss of independence, or marital stress. The affects of alcohol abuse can be even more damaging to individuals with SCI because the body’s organs and systems are often weaker after injury. Individuals with SCI who abuse alcohol can have increased risk of spasticity, bone fractures, pressure sores, UTIs, and malnutrition. Alcohol can also be dangerous when mixed with medication.

People who abuse alcohol and their family members may deny there is a problem. How do you know if you have a problem? Ask yourself these four questions;

1. Have you ever felt you should cut down on your drinking?
2. Have people annoyed you by criticizing your drinking?
3. Have you ever felt bad or guilty about your drinking?
4. Have you ever taken a drink first thing in the morning as an eye opener to steady your nerves or get rid of a hangover?

If you answered “yes” to one of the questions, it is a warning sign that you may have a problem with alcohol abuse. If you answer “yes” to 2 of these questions, there is an 81 to 97% chance that you abuse alcohol. If you believe that you have a problem, seek help! You can ask a family member, doctor, or clergy to help you find help.

Personal Care

Most everyone reaches a time in their life when they begin to need help with some everyday activities. At first you may only need help with yard work or heavy household duties. Over time some people need more help with shopping, cooking, walking, and other daily activities. Some people need more help than others. Some people rely on family assistance and/or assistive living.

About 40% of all individuals with SCI who are under the age of 60 need some form of personal assistance. As you get older, you will need more assistance too. People with SCI and people in the general population need to plan ahead for this time. You may need to depend on others for some, if not all, of your daily activities. Many people rely on the assistance of a spouse or family member, but it often does not work out. You have to remember that your spouse/caregiver is getting older too. You should make a good personal and financial plan right now so that you are prepared in case of the loss of a spouse. Make a plan for assisted living arrangements, and make sure your family understands what you want.

Conclusion

It is impossible to cover all aspects of aging. You owe it to yourself to learn more about these topics along with topics like fatigue, respiratory function, and many others. You can be prepared for what you may experience as you get older. After all, everyone hopes for a very long and healthy life, but not everyone is prepared if life does not end up as they hoped. Talk with your family and your doctor and prepare for the future today.
Cranberry Pills vs. UTIs! - Volunteers are needed for study to determine whether the antibacterial effects of cranberry pills can reduce the number of symptomatic urinary tract infections in persons with SCI. Bladder management must be condom or ICP to participate. For more information call 205-934-0355.

Telehealth Study Needs Volunteers- UAB RRTC seeks individuals with SCI and their family caregivers for an in-home information service regarding adjustment to SCI and problem-solving skills. Participants need only to live in Alabama and have a touch-tone phone and television. All other equipment will be provided. For more information, contact Monica Kurylo, PhD by email at mkurylo@uab.edu or by phone at 205-934-3454.

Pneumococcal Vaccine Study Needs Volunteers - This study is to determine the percentage of persons with SCI who maintain protection against pneumococcal pneumonia and the extent that revaccination increases protection. For more information call 205-934-0355.

SCI Email Distribution- Receive notices via email as new and updated SCI material from UAB becomes available; email klebine@uab.edu and type in subject or body of email, "subscribe to SCI email distribution list."

Pushin' On is also available on the SCI Information Network web site at www.spinalcord.uab.edu and the new Fax System at 205-975-8376. Call from your fax machine and follow the voice menu options to receive various SCI related material.

Book on Aging


For more information on Alcohol and Drug Abuse, contact:

RRTC for Substance Abuse and Disability
c/o Wright State University, School of Medicine,
3640 Colonel Glenn Highway, Dayton, OH 45435
Phone: 513-259-1384

Resources

Web Resources

Women's Issues

SCI & Aging


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