

A Letter from Home

A NEWSLETTER FOR CAREGIVERS

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CARE OF THE GERIATRIC CLIENT, PART 1

According to the Administration on Aging, the older population (65+) numbered 39.6 million in 2009, an increase of 4.3 million or 12.5% since 1999. Over one in every eight, or 12.9%, of the population is an older American. Those working in home care will continue to see a large proportion of elderly clients, and therefore should have an excellent working knowledge of physiological changes that occur with the aging process. Because there are many bodily functions affected with age, this large subject will be divided into two issues of *A Letter from Home*.

Skin Changes

The most notable skin change with age is the development of wrinkles. Studies indicate that 90% of these wrinkles are due to years of sun exposure and can actually be prevented or minimized with proper use of sun screen. Sun exposure can cause the elastic tissue in the skin to break down and causes the skin to stretch, sag and wrinkle. As a person ages, the epidermal cells become thinner and flatter causing the skin to become almost transparent.

Another problem created when the cells flatten is that they become less effective in functioning as a barrier and are more likely to allow moisture to be released instead of kept in the skin. This is one reason the elderly have drier skin. Also, with age the actual number of epithelial cells decreases by about 10% per decade and also divide more slowly, making our older client's wound healing much slower. In fact, according to one study, an older client's wounds take 4 times longer to heal.

Another issue affecting our older clients is a decrease in the blood flow to the skin. As circulation decreases, it can affect the sensitivity of our touch receptors and nerve endings. Therefore, our older clients often do not have as strong a reaction to pain, temperature or touch. This can cause severe consequences for the

elderly. If a client has decreased pain and touch sensitivity, they may not be aware that their shoes are rubbing or that they have an injury. This can create conditions for a pressure ulcer or skin breakdown to occur without the client's knowledge. This decrease in touch sensitivity can also cause the client to be more prone to accidental burns or scalding as their reaction time to a painful stimulus will be slowed down.



The capillaries of an older person are much more prone to rupture. Have you ever seen a client with constant blue/black discolorations on their forearms and shins? (see picture on page three) Very often, the client will have no pain with these areas even though they can appear quite severe. Often too, the client may not even remember bumping or hitting their skin. This can be much worse if the client is also on a blood thinner or aspirin.

The loss of fatty layer and thinning of the epidermal cells can increase a client's incidence of developing a skin tear. A skin tear appears when fragile skin is hit against a hard or sharp object. Also shearing forces and friction can be an important risk factor. Very often, the cause is a small, minor accident which happens all the time at home (hitting the shin on a coffee table or hitting the arm against a counter).

Finally, the sweat glands decrease in the skin with age. Sweat glands are important in helping regulate body temperature. Therefore, the elderly are more prone to dehydration and heatstroke.

Eye Changes

As we age, our pupils become smaller. Because of the smaller pupil size, older eyes receive much less light at the retina than that of a 20 year old. A younger person receives six times more light than that of an 80 year old! This means that the older person needs much more light to see the same as a younger person. Also, the muscles that control the constriction and dilatation of the pupil weaken with age. These two factors are the reasons that the older clients have a much more difficult time seeing at night or going from a darkened to a well-lit area. We as home care workers need to make sure we provide sufficient light for our clients and ensure that they are given more time for their eyes to adjust to a darker or brighter area.

The retina of older client's eyes also experience age-related changes. There is a reduction of rods in the peripheral area, resulting in lost peripheral vision. Decreased cones of the retina can result in less color perception, especially for blues, greens and violets. Things with low contrast are more difficult to see. This is why older clients are more likely to fall if an uneven floor surface is all one color. For example, it may be difficult for a client to see where the street meets the curb and then the sidewalk, resulting in a fall. Other issues resulting from low contrast vision include the inability to see faces as well or the ability to tell the different colors of pills apart, especially if they are pastel colors.

Finally, eye muscle elasticity is less, so vision may be blurry or seem out of focus. The elderly client may have to really concentrate, especially in darker areas to get the eyes to focus.

Hearing

According to a study at Johns Hopkins University, 63% of the subjects over age 70 experienced hearing loss, ranging from mild to severe. Despite this large number with hearing loss, only approximately 20% actually use a hearing aid or device.

With age, the eardrum becomes less flexible in the middle ear, decreasing sound



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wave transmission. Approximately 90% of hearing loss is thought to be due to environmental factors, such as loud noises. Therefore, older men generally have hearing loss in greater numbers than women because they have been exposed to more environmental factors such as construction noises, machinery or other loud noises over their lifetime.

Another common factor in aging is the loss of high pitch frequency sounds. Many consonants such as t, p, s, j, th, sh, and ch are more difficult to distinguish with age. For clients with a high pitch frequency loss, it sounds as if those letters are dropped off. Therefore, the words may be hard to discriminate and similar words may be hard to tell apart and misunderstandings can result. The older client may think that those with high pitch voices, such as women and children, are mumbling. When talking to a client with a high frequency loss, do not raise the loudness of your voice to speak. Rather, lower the actual tone of your voice to make it deeper. This will help the client to better understand what you are saying, especially if you have a higher pitched voice.

Taste and Smell

Taste buds decline significantly, beginning about age 50, but luckily we have approximately 10,000 taste buds so that taste is not largely affected until much later in life. However, by the age of 80, some of those taste cells do not get replaced and we may only have 5,000 working taste buds. That's why certain foods may taste bland or tasteless to our older clients. Smoking and certain medications can also decrease a person's number of taste buds.

Saliva production decreases with age and can impact taste. Have you ever noticed that foods do not taste as good when you are taking a decongestant or you have a dry mouth? This is because saliva is important to move food throughout our mouths to make contact with all the sensory taste buds. With less saliva, our clients can experience less taste.

Do your clients seem to pile on the sugar and salt to their foods? If so, this is because the ability to taste sweet and salt is more affected with age than the tastes for sour and bitter. This is unfortunate as our clients often are on salt and sugar restricted diets and it may be more difficult for them to limit sugar and salt. The sense of smell is also decreased with age. Strong smells are still easily detected, but the more subtle smells are more difficult to identify. This can cause issues with the client eating things that are spoiled because they cannot detect that the food smells "off". The sense of smell and taste are also connected. Without a sense of smell, our clients will have reduced taste. This is why when you have a cold, your food does not have any appeal and may taste bland.

There are many age associated changes that are considered a normal part of aging. However all clients will experience the aging process differently. There is a range of individual response to aging that will be affected by the client's genetics, environment and lifestyle. Biologic and chronologic ages are not the same in every person and body systems do not age at the same rate within any individual. Even those aging changes that are considered "normal" are not inevitable consequences of the aging process. Each of your clients will experience aging differently, but by increasing your knowledge of the normal processes, you will be able to better assist and care for them.



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