

Functional Adaptations of the Home for Those with Weakness, Fatigue and/or Pain

Accommodations to manage medications and reduce fall risk can help patients remain in their own homes.

By Matthew D. Hansen, DPT, MPT, BSPTS



WHEN MEETING WITH new clients to set goals, I always ask what their top three priorities are in life. And, almost always, regardless of the medical diagnosis, my clients express the desire to stay in their own home. Yet, many have admitted they aren't completely honest with their family and medical providers about safety and independence at home. Usually, this is because they have concerns, but they are afraid disclosing them will force a conversation about relocation.

Comments such as "Maybe home isn't the safest place for you any longer, Mom," "We could start looking at places this weekend where you could get some extra help," "You could move into that extra bedroom we have and stay with us" or "I'm sure we could find another good home for the dog" are

not uncommon. And, even though these comments may be practical solutions given the circumstances, they are also very difficult to hear, because they can signal a loss of independence.

I don't advocate for staying at home at all costs. However, if clients would like to remain home or don't have other options but to remain home, there are a number of solutions to safely do so. Having said that, using a lawn chair in the shower, a piece of quarter-inch plywood for a ramp, or stacking boxes in the living room so there is something to hold onto every couple of steps are not safe solutions. I've seen just about everything.

Medication Management

One of the greatest dangers to a person's safety at home is medication errors, which are frequently related to confusion or memory concerns. However, they may also be related to weakness, fatigue or pain if a person is not able to independently open a pill container or if he or she has medications spread throughout the home and doesn't have the stamina to gather them when it's time.

Medications should be kept in an organizer and in one place so there are no missed or inaccurate doses. Many people use inexpensive plastic pill boxes. This is a better strategy than keeping medications in a shoebox or in several places throughout the home. However, if reminders are needed to take medications or if a person has difficulty remembering if he or she has taken medications, a timed medication lockbox or other automated dispenser should be considered. The dispenser still needs to be organized by someone so it will automatically open the correct door on the pillbox or dispense the medication after alerting the individual of the proper time to take it.

Another alternative offered by some pharmaceutical companies is prepackaged and delivered medications in a color-coded blister pack for morning, afternoon and/or evening administrations, making organization relatively simple.

Falls

Risk of falls is another common safety issue at home. Falls are often people's greatest fear, particularly if they live alone and are prone to balance issues associated with neuropathy, dizziness or weakness. Standard practice for most home health agencies is to conduct a home safety evaluation as part of their initial assessment. It's a great place to start for anyone. If a person doesn't contract with a home health agency, an evaluation by a skilled private-duty agency can be requested. Or, there are several safety checklists on the Internet to use to review the home with a friend or family member (see "Improving Safety, Mobility and Activities of Daily Living at Home" in the February-March 2017 issue of *IG Living* at www.igliving.com/magazine/articles/IGL_2017-02_AR_Improving-Safety-Mobility-and-Activities-of-Daily-Living-at-Home.pdf).

Following are modifications that can be considered for each area of the home:

Yard and front porch. Common hazards outside of the home include uneven ground and sidewalk/driveway surfaces, ice, wet leaves, sprinkler heads and tools or garden hoses that are not properly stored. Fallen leaves and grass clippings should be picked up promptly, and icy surfaces should be treated with ice melt or sand where ice melt products are not allowed or recommended.

Consider using an assistive device for support or a yard wagon to transport garden tools, supplies, etc., if two hands would otherwise be required. And, try to keep items as close as possible to the area they are needed (this is a great principle for inside and outside the home).

Look for ways to work in the garden without bending over. If sitting on the ground is not an option, consider sitting in a chair or using long-handled tools instead of bending over from a standing position.

For many, the greatest need for permanent modifications outside the home are on the front and back porches. There should be at least one handrail in place for any set of stairs, even when there aren't more than one or two steps to navigate. Anti-slip tape can be added to the edge of the stair or tread for additional security, and special door delivery of mail can be requested from the post office.

For those who use an adaptive walker or a wheelchair, a ramp may be needed. If the home has only a couple steps, a prefabricated aluminum ramp may be sufficient. Otherwise, a customized metal or wood ramp may be required. Again, a

piece of plywood might be functional, but it's not safe and could lead to a life-altering or life-threatening fall.

Living spaces. In addition to keeping living spaces clutter-free, proper footwear inside and outside of the home is important. Heels, flip-flops and any footwear with an open back or slippery sole can be bad news. Additionally, if an assistive device has been prescribed, it should be used properly, even if it's inconvenient. I've seen too many walkers and canes that were supposed to be aids become hazards because they were left in the way. Be sure to check rubber cane tips for wear, and replace them when needed.

Loose cords/cables and oxygen tubing are other common tripping hazards. Cords should be kept together and close to the wall rather than strewn across walking paths. A number of retail products can help with organization. Special colored tubing can be purchased for supplemental oxygen users, or bright-colored tape can be placed at 12-inch intervals along the tubing to alert the user and others of its presence.

Wherever possible, household and food items should be moved down from top shelves to eliminate the need for reaching overhead or using a step stool. Similarly, items on bottom shelves near the floor should be moved up to eliminate the need to bend below the waist. If moving low items is not an option, sitting down to access them may be a better one.

There are several considerations for improving transfers in the living room or bedroom. Oftentimes, having a properly height-adjusted bed is enough to allow someone to continue transferring independently. Motorized and manual height-adjustable beds and hospital beds are available. Other transfer-assist options include bed canes, transfer poles, power-lift recliners and hydraulic or ceiling track patient lifts to transfer someone to and from bed and a wheelchair or shower chair, or in the case of a ceiling track lift, to another location in the home (a second person is required to operate the lift).

Though they can be expensive modifications, some people may need to have inside doorways widened to accommodate a walker or wheelchair, and/or they may need a stair lift or elevator put in place if they are unable to negotiate stairs in the home and can't live solely on the ground level. Where possible, laundry washers/dryers and other essentials should also be placed on the same level as the person's living space to reduce the number of required trips up and down the stairs.

Finally, take advantage of developments in technology. Most appliances or other devices plugged into outlets (thermostat, television, washer/dryer, doorbell and other security

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*Ig=immunoglobulin

Important Safety Information

WARNING: Thrombosis (blood clots) can occur with immune globulin products, including Hizentra. Risk factors can include: advanced age, prolonged immobilization, a history of blood clotting or hyperviscosity (blood thickness), use of estrogens, installed vascular catheters, and cardiovascular risk factors.

If you are at high risk of blood clots, your doctor will prescribe Hizentra at the minimum dose and infusion rate practicable and will monitor for signs of clotting events and hyperviscosity. Always drink sufficient fluids before infusing Hizentra.

See your doctor for a full explanation, and the full prescribing information for complete boxed warning.

Hizentra is a prescription medicine used to treat:

- Primary immune deficiency (PI) in patients 2 years and older
- Chronic inflammatory demyelinating polyneuropathy (CIDP) in adults

Treatment with Hizentra might not be possible if your doctor determines you have hyperprolinemia (too much proline in the blood), or are

IgA-deficient with antibodies to IgA and a history of hypersensitivity. Tell your doctor if you have previously had a severe allergic reaction (including anaphylaxis) to the administration of human immune globulin. Tell your doctor right away or go to the emergency room if you have hives, trouble breathing, wheezing, dizziness, or fainting. These could be signs of a bad allergic reaction.

Inform your doctor of any medications you are taking, as well as any medical conditions you may have had, especially if you have a history of diseases related to the heart or blood vessels, or have been immobile for some time. Inform your physician if you are pregnant or nursing, or plan to become pregnant.

Infuse Hizentra under your skin *only*; do not inject into a blood vessel. Self-administer Hizentra only after having been taught to do so by your doctor or other healthcare professional, and having received dosing instructions for treating your condition.

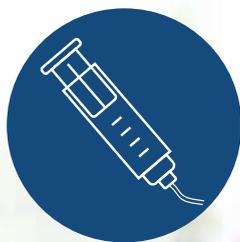
Immediately report to your physician any of the following symptoms, which could be signs of serious adverse reactions to Hizentra:

Why Choose Hizentra?



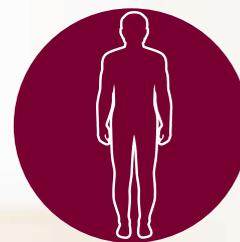
Choose where you infuse

Self-administration with Hizentra means you and your doctor can decide where you can infuse. Convenient dosing routines mean you won't have to adjust or cancel your plans due to IV infusion appointments.



No IV infusions

IV infusions can be challenging for people who have hard-to-find or damaged veins. Hizentra allows you to infuse just under the skin, not into a vein, after training from your doctor.



Proven safety

Hizentra has an established safety profile and demonstrated tolerability. In clinical trials, the most common side effects were redness, swelling, itching, and/or bruising at the infusion site; headache, chest, joint or back pain; diarrhea; tiredness; cough; rash; itching; fever, nausea, and vomiting. These are not the only side effects possible.

Discover all the benefits Hizentra has to offer at Hizentra.com

- Reduced urination, sudden weight gain, or swelling in your legs (possible signs of a kidney problem).
- Pain and/or swelling or discoloration of an arm or leg, unexplained shortness of breath, chest pain or discomfort that worsens on deep breathing, unexplained rapid pulse, or numbness/weakness on one side of the body (possible signs of a blood clot).
- Bad headache with nausea; vomiting; stiff neck; fever; and sensitivity to light (possible signs of meningitis).
- Brown or red urine; rapid heart rate; yellowing of the skin or eyes; chest pains or breathing trouble; fever over 100°F (possible symptoms of other conditions that require prompt treatment).

Hizentra is made from human blood. The risk of transmission of infectious agents, including viruses and, theoretically, the Creutzfeldt-Jakob disease (CJD) agent and its variant (vCJD), cannot be completely eliminated. The most common side effects in the clinical trials for Hizentra include redness, swelling, itching, and/or bruising at the infusion site;

headache; chest, joint or back pain; diarrhea; tiredness; cough; rash; itching; fever, nausea, and vomiting. These are not the only side effects possible. Tell your doctor about any side effect that bothers you or does not go away.

Before receiving any vaccine, tell immunizing physician if you have had recent therapy with Hizentra, as effectiveness of the vaccine could be compromised.

Please see brief summary of full prescribing information for Hizentra on adjacent page. For full prescribing information, including boxed warning and patient product information, please visit Hizentra.com.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

You can also report side effects to CSL Behring's Pharmacovigilance Department at 1-866-915-6958.

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BRIEF SUMMARY OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use HIZENTRA safely and effectively. See full prescribing information for HIZENTRA.

WARNING: THROMBOSIS

See full prescribing information for complete boxed warning.

- **Thrombosis may occur with immune globulin products, including HIZENTRA. Risk factors may include: advanced age, prolonged immobilization, hypercoagulable conditions, history of venous or arterial thrombosis, use of estrogens, indwelling vascular catheters, hyperviscosity, and cardiovascular risk factors.**
- **For patients at risk of thrombosis, administer HIZENTRA at the minimum dose and infusion rate practicable. Ensure adequate hydration in patients before administration. Monitor for signs and symptoms of thrombosis and assess blood viscosity in patients at risk for hyperviscosity.**

INDICATIONS AND USAGE

HIZENTRA is indicated for:

*Treatment of primary immunodeficiency (PI) in adults and pediatric patients 2 years and older.

* Maintenance therapy in adults with chronic inflammatory demyelinating polyneuropathy (CIDP) to prevent relapse of neuromuscular disability and impairment.

-Limitation of Use: Maintenance therapy in CIDP has been systematically studied for 6 months and for a further 12 months in a follow-up study. Continued maintenance beyond these periods should be individualized based on patient response and need for continued therapy.

For subcutaneous infusion only.

DOSAGE FORMS AND STRENGTHS

0.2 g per mL (20%) protein solution for subcutaneous injection

CONTRAINDICATIONS

- Anaphylactic or severe systemic reaction to human immune globulin or components of HIZENTRA, such as polysorbate 80
- Hyperprolinemia (type I or II) (HIZENTRA contains the stabilizer L-proline)
- IgA-deficient patients with antibodies against IgA and a history of hypersensitivity

WARNINGS AND PRECAUTIONS

- IgA-deficient patients with anti-IgA antibodies are at greater risk of severe hypersensitivity and anaphylactic reactions.
- Thrombosis may occur following treatment with immune globulin products, including HIZENTRA.
- Aseptic meningitis syndrome has been reported with IGIV or IGSC, including HIZENTRA treatment.
- Monitor renal function, including blood urea nitrogen, serum creatinine, and urine output in patients at risk of acute renal failure.
- Monitor for clinical signs and symptoms of hemolysis.
- Monitor for pulmonary adverse reactions (transfusion-related acute lung injury [TRALI])
- HIZENTRA is made from human plasma and may contain infectious agents, e.g., viruses, the variant Creutzfeldt-Jakob disease (vCJD) agent and, theoretically, the Creutzfeldt-Jakob disease (CJD) agent.

ADVERSE REACTIONS

The most common adverse reactions observed in ≥5% of study subjects were local infusion site reactions, headache, diarrhea, fatigue, back pain, nausea, pain in extremity, cough, upper respiratory tract infection, rash, pruritus, vomiting, abdominal pain (upper), migraine, arthralgia, pain, fall and nasopharyngitis.

To report SUSPECTED ADVERSE REACTIONS, contact CSL Behring Pharmacovigilance at 1-866-915-6958 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS

The passive transfer of antibodies may interfere with the response to live virus vaccines, and lead to misinterpretation of the results of serological testing.

Based on March 2018 revision

cameras, lighting, etc.) now have an option (or model) that can be controlled from a remote control or smartphone. Amazon Echo, Google Home and other smart devices have many features to make life easier. The point isn't to eliminate physical movement, but to increase "smart" movement so energy can be conserved, safety improved and pain reduced.

Bathroom. Walk-in bathtubs or showers with a barrier-free threshold are ideal; however, they aren't an alternative for everyone. To improve transfers and safety in a more traditional tub shower, a transfer bench can be used. If transfers aren't the problem but maintaining a standing position in the shower is, utilize a shower chair (not a lawn chair). Handheld showerheads help to wash and rinse difficult-to-reach areas, as can a long-handled sponge. Don't forget nonslip bath mats (inside and outside of the shower/tub).

Grab bars are an important installation in any bathroom, and often in other areas of the house, too. Be sure to have them mounted properly per the manufacturer's instructions, and don't use suction cup grab bars, even though the convenience of a movable product might be tempting. They simply aren't as safe. An occupational or physical therapist can help to indicate proper positioning of the bars.

To make toileting easier, a raised toilet seat and/or toilet frame can be acquired. Availability of a commode chair might be a good idea for those who aren't able to safely make it into the bathroom or if they don't have enough energy to do so as often as their body demands.

Personal Care

When more help is required than what family, friends or someone can provide, employing the services of a personal care agency may be considered before looking at other options. Caregiver aides can assist with just about anything a person might need help with or can no longer do on their own, including meal preparation, errands, shopping, transportation, bathing, dressing, toileting, companionship and housekeeping. An agency designated as "skilled" can also provide nursing services at home, including medication management, infusions, triage/wellness checks, wound care, etc., even when insurance will not pay for services through a home-health episode.

Unfortunately, personal care still falls in the realm of private duty and, unless someone has a long-term care insurance policy or Veteran's Administration (VA) benefits, these services will have to be paid out of pocket. And, while the

Centers for Medicare and Medicaid Services now allows Medicare Advantage plans to cover personal care services, there aren't many companies paying for them yet.

Smart Spending

Much home adaptation equipment typically not covered by insurance (e.g., grab bars, shower chairs, raised toilet seats, transfer benches) can be found in local home-improvement stores or drugstores.

Insurance companies don't yet pay for bathroom equipment. Therefore, before purchasing something new, used equipment can sometimes be found on the Internet by searching for "adaptive equipment foundations" or "adaptive equipment loaning closets." Or, equipment can sometimes be found by searching for "adaptive home modifications," "funding adaptive home modifications" and "adaptive housing." In addition, local thrift shops often have used equipment. Be sure, though, that any used equipment is thoroughly inspected for safety. Veterans should also check with the local VA clinic to ask for help.

For more expensive equipment and modifications (e.g., stair lifts, patient lifts, assistive devices), a doctor's order and a good letter of medical necessity from a therapist or physician may be sufficient to get insurance approval. The letter should focus on how the equipment will improve the intended user's independence and protect their safety, with an explanation of what anticipated consequences would ensue without the equipment. Also, some patient advocacy groups have equipment grants for individuals with a specific medication condition.

Staying in Place

Don't get discouraged if money is tight, and don't be afraid to spend the money if support is needed. While some modifications can be expensive, there are resources to help. The alternatives, whether they be voluntary relocation or a required rehab stay in a hospital or skilled nursing facility due to injury or self-neglect, can be much more costly to the pocketbook, the medical system and a person's independence. ■

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