

How to help young people with incontinence due to central nervous illnesses.

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Neurogenic incontinence as the result of CNS illnesses

Incontinence, or the loss of bladder or bowel control, can be caused by a variety of neurologic and brain diseases. One example is Parkinson's disease, which is characterized by the degeneration of dopamine-producing neurons in the substantia nigra. This leads to imbalances in the brain's signaling system and can result in difficulties with controlling urination and bowel movements.

Another example is Wilson's disease, a genetic disorder that causes the accumulation of copper in the brain and other organs. This can lead to damage in the basal ganglia, including the substantia nigra, and can result in incontinence.

H63D Syndrome is a rare genetic disorder that causes a mutation in the HFE gene. This leads to iron accumulation in the brain and other organs, including the substantia nigra. This can cause Parkinsonism symptoms, such as tremors, stiffness, and incontinence. In general, any disease or condition that affects the brain's ability to communicate

with the muscles that control the bladder and bowel can lead to incontinence. This can include conditions such as multiple sclerosis, spinal cord injuries, and certain types of dementia.

In conclusion, Incontinence can be caused by neurologic and brain diseases, including Parkinson's disease, Wilson's disease, H63D Syndrome and other conditions that affect the brain's ability to communicate with the muscles that control the bladder and bowel. The substantia nigra, an area of the brain that plays a crucial role in motor control and is affected by these diseases, may have a role in the development of incontinence.

In addition to the diseases and conditions mentioned earlier, there are several different types of urine incontinence that can occur as a result of neurologic and brain diseases. Stress incontinence is characterized by leakage of urine during physical activity, such as coughing, sneezing, or laughing. This type of incontinence can occur as a result of damage to the muscles and nerves that control the bladder, and can be caused by conditions such as multiple sclerosis and spinal cord injuries.

Urge incontinence, also known as overactive bladder, is characterized by a sudden and intense urge to urinate followed by leakage. This type of incontinence can occur as a result of damage to the nerves and brain regions that control the bladder, and can be caused by conditions such as Parkinson's disease and certain types of dementia. Functional incontinence is characterized by the inability to reach the toilet in time due to physical or cognitive limitations. This type of incontinence can occur as a result of mobility issues caused by conditions such as Parkinson's disease and multiple sclerosis. Mixed incontinence is a combination of stress and urge incontinence. This type of incontinence can occur as a result of a combination of factors, including nerve and muscle damage, as well as cognitive impairment. It's worth noting that some of the mentioned diseases can lead to different types of incontinence. For example, Parkinson's disease can lead to both urge and functional incontinence, while Wilson's disease can lead to both stress and urge incontinence. In summary, neurologic and brain diseases can cause different types of urine incontinence such as stress, urge, functional and mixed incontinence. These types of incontinence can occur as a result of damage to the muscles and nerves that control the bladder, as well as damage to the brain regions that control the bladder, and mobility issues. The specific type of incontinence can vary depending on the underlying disease or condition.

It is important to note that incontinence caused by neurologic and brain diseases is typically not curable. While certain medical and surgical treatments can help to manage the symptoms, the underlying damage to the brain and nerves cannot be reversed. For example, Parkinson's disease is a progressive disorder, and as the disease progresses, the symptoms of incontinence may become more severe. Similarly, in Wilson's disease, the accumulation of copper in the brain is irreversible and the disease is chronic, so the incontinence symptoms will not be cured. In cases of

stress incontinence, pelvic floor exercises and other forms of physical therapy can help to strengthen the muscles that control the bladder and reduce leakage. Medications such as anticholinergics can also be used to help control the symptoms of urge incontinence. However, these treatments do not cure the underlying condition and may not be effective in all cases.

For those with functional incontinence, assistive devices and modifications to the home environment can help to improve mobility and make it easier to reach the toilet in time. However, these measures do not address the underlying cause of the incontinence. It is important for individuals with neurologic and brain diseases that cause incontinence to work closely with their healthcare provider to develop a treatment plan that is tailored to their specific needs. This may include a combination of medical and lifestyle interventions, as well as a plan for managing incontinence-related symptoms on a daily basis. So, incontinence caused by neurologic and brain diseases is typically not curable. The underlying damage to the brain and nerves cannot be reversed, and while certain medical and surgical treatments can help to manage the symptoms, they don't cure the underlying condition. It's crucial for individuals with these diseases to work closely with their healthcare provider to develop a treatment plan that addresses their specific needs.

How to manage urge incontinence which is the result of a neurologic illness

Managing urge incontinence, which is caused by a neurologic illness, can involve a combination of medical and lifestyle interventions. Here are a few strategies that may be helpful:

1. **Drugs:** Anticholinergic medications can help to reduce the frequency and urgency of urination by relaxing the

muscles of the bladder. Medications such as oxybutynin, tolterodine, and solifenacin are commonly used to treat urge incontinence.

2. Pelvic floor exercises: These exercises, also known as Kegel exercises, can help to strengthen the muscles that control the bladder and reduce leakage.
3. Assistive devices: Devices such as alarms, pads, and catheters can be used to manage incontinence-related symptoms on a daily basis.
4. Cognitive-behavioral therapy: This type of therapy can help to address any psychological factors that may be contributing to urge incontinence, such as anxiety or depression.

It is important to note that not all of these strategies will work for everyone, and it may take some trial and error to find the most effective approach. It's also crucial to work closely with your healthcare provider to develop a treatment plan that is tailored to your specific needs and condition, as some of the mentioned strategies may not be appropriate or safe for certain individuals.

The 'gold standard' is still an external catheter with an adhesive tube being installed on the penis and connected with a catheter bag, typically worn on a leg or hanging on the bed. This can be an effective option for managing urge incontinence in patients with neurologic illnesses for a few reasons:

1. Convenience: External catheters are non-invasive and do not require any surgical procedures. They are easy to use, and the catheter bag can be easily emptied as needed.
2. Efficient: External catheters allow for continuous drainage of the bladder, which can be especially helpful for individuals with severe urge incontinence. This can help to prevent accidents and keep the patient dry and comfortable.
3. Reduced risk of infection: External catheters do not require insertion into

the bladder, which reduces the risk of infection compared to internal catheters.

4. Comfort: External catheters are designed to be worn discreetly under clothing, and are made from materials that are gentle on the skin.
5. Cost-effective: External catheters are a relatively low-cost option for managing incontinence and can be a cost-effective solution for long-term management of the condition.

External catheters

An external catheter, also known as a condom catheter, is worn on the penis and is, as mentioned earlier, connected to a drainage bag. The catheter is typically worn day and night without any pauses for several reasons:

1. Continuity of Care: External catheters are designed to provide continuous drainage of the bladder, which can be especially helpful for individuals with severe urge incontinence. This can help to prevent accidents and keep the patient dry and comfortable.
2. Reduced Risk of Infection: By providing continuous drainage, the external catheter reduces the risk of urinary tract infections. When the bladder is not drained regularly, urine can accumulate and create a breeding ground for bacteria.
3. Improved Quality of Life: Wearing the external catheter 24 hours a day allows the patient to maintain their independence and mobility, and can improve their quality of life.
4. Cost-effective: External catheters are a relatively low-cost option for managing incontinence and can be a cost-effective solution for long-term management of the condition.

Emotional issues and compliance

However, in some cases, patients may not be compliant with wearing the external

catheter day and night. These patients may have difficulty remembering to change the catheter or may find it uncomfortable to wear. In such cases, an internal catheter may be a better option. An internal catheter, also known as a indwelling catheter, is inserted directly into the bladder and is connected to a drainage bag. Internal catheters typically need much more care and high levels of hygiene. They are therefore only useful for patients who are unable to manage the external catheter themselves and require constant care.

In summary, the optimal solution is an external catheter that is worn day and night without any pauses to provide continuous drainage of the bladder, reduce the risk of urinary tract infections, improve the patient's quality of life and cost-effective solution for long-term management of the condition. However, in some cases, patients may not be compliant with wearing the external catheter, in such cases, an internal catheter may be a better option. It's important to consult with a healthcare professional to determine the most appropriate management strategy for a specific patient.

The use of a catheter with a bag, whether it be an external or internal catheter, can be associated with feelings of humiliation and embarrassment for some individuals, particularly for young men. This is likely due to a number of factors, including:

1. Stigma associated with incontinence: Incontinence is often associated with aging and can be perceived as a sign of weakness or lack of control. This can be especially stigmatizing for young men who may feel that they do not fit the typical profile of someone with incontinence.
2. Body image concerns: Wearing a catheter with a bag can be physically visible and may be perceived as unsightly. This can lead to concerns about body image and self-esteem.
3. Loss of privacy: The need to wear a catheter with a bag may require the

individual to reveal their condition to others, which can be a loss of privacy and a source of embarrassment.

4. Fear of rejection: The individual may worry that their condition will be viewed negatively by others and may fear rejection as a result.
5. Impact on sexual functioning: Incontinence can also have an impact on sexual functioning and may lead to feelings of insecurity and reduced sexual self-esteem.

Guidance for those patients who show a low compliance

It's worth noting that these feelings are normal and understandable, however, it's important to seek professional help to address these feelings as well as to manage the underlying condition that causes incontinence. A healthcare professional can provide guidance and support on how to manage incontinence and can also refer to a counselor or therapist to address any emotional concerns.

When explaining to a patient that they have no alternative but to wear a catheter, it is important to approach the topic with sensitivity and empathy. Here are a few strategies that may be helpful:

1. Provide clear and direct information: Explain the condition that is causing the incontinence and why the catheter is necessary for managing the symptoms. Be sure to address any concerns or questions the patient may have about the catheter, including how it is used and how to properly care for it.
2. Emphasize the benefits of the catheter: Explain how the catheter will improve the patient's quality of life by reducing the risk of accidents and maintaining their independence and mobility.
3. Address any possible concerns: Understand and acknowledge the patient's feelings of embarrassment or humility, and let them know that these

feelings are normal. Provide support and guidance on how to cope with these emotions and address them.

4. Offer alternative solutions: If there are alternative solutions, such as medication or lifestyle changes, explain the benefits and drawbacks of each option. Help the patient understand that the catheter is the best option for them and why.
5. Communication with the patient's family and caregivers: If the patient needs assistance in managing the catheter, it is important to involve the patient's family and caregivers in the conversation. Explain the catheter's usage, maintenance, and the importance of compliance.
6. Follow up regularly: Follow up with the patient regularly to ensure they are comfortable with the catheter and to address any concerns or issues that may arise.

It is important to remember that every patient is unique and may have different concerns and needs. It's crucial to tailor the conversation and approach to the specific patient and to be understanding, empathetic and patient-centered. When explaining to a patient that they have no alternative but to wear a catheter, it is important to approach the topic with sensitivity and empathy. Provide clear and accurate information, emphasize the benefits of the catheter, address emotional concerns, offer alternative solutions, involve the patient's family and caregivers and follow up regularly.

Switching a patient to incontinence diapers for a couple of weeks before introducing the use of a catheter may improve compliance for wearing a catheter drastically because incontinence diapers can serve as an unpleasant reminder of the consequences of not managing incontinence properly. Incontinence diapers are emotionally difficult as they can be associated with feelings of embarrassment and a loss of independence and they are not very hygienic which can lead to skin irritation

and infection. On top of that, if the diapers are not changed frequently, they can become heavy and uncomfortable, making walking difficult. By using incontinence diapers for a short period of time, the patient may come to realize the negative consequences of not managing their incontinence effectively and be more motivated to use the catheter as an alternative. The catheter, in comparison, may be seen as a more desirable option as it provides a more hygienic and comfortable solution for managing incontinence. Honesty is a good motivator for patients to use their catheter because it allows them to fully understand the consequences of not managing their incontinence effectively. Many patients, particularly younger adults, may not want to believe that they will need these helps, and may have misconceptions about the use of catheters.

By being honest with the patient about their condition and the benefits of using a catheter, healthcare providers can help to dispel these misconceptions and provide a clear understanding of the importance of managing incontinence. This can help to increase the patient's motivation to use the catheter and improve their compliance with the treatment plan. Being honest also includes addressing the emotional and psychological aspects of incontinence, such as feelings of embarrassment, loss of independence and body image concerns. A healthcare professional can provide support and guidance on how to cope with these emotions and address them.

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Conflicts of interest

None declared.

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