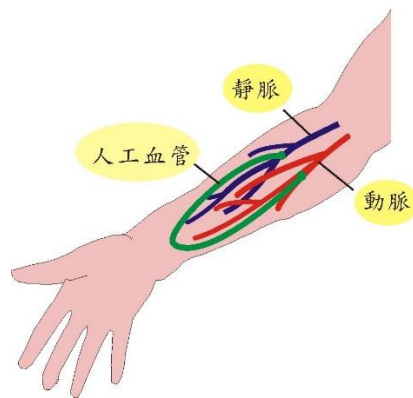




血液透析病人動靜脈瘻管照護

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Care for Arteriovenous Fistula in Hemodialysis Patients



1. What is Arteriovenous Fistula?

一、什麼是動靜脈瘻管：

An arteriovenous fistula involves connecting two blood vessels together, specifically sewing an artery and a vein together beneath the skin. This connection allows arterial blood to directly shunt into the vein, enabling a large volume of blood to flow through. This pathway is known as a fistula and is utilized for hemodialysis.

是將兩條血管接在一起，也就是把一條動脈及一條靜脈在皮膚下縫合在一起，這樣的連接使動脈的血直接分流到靜脈來，讓大量的血液流過，這一條血液透析的通路就叫瘻管。

2. Postoperative Care for Arteriovenous Fistula:

二、動靜脈瘻管手術後的照顧：

1. Elevate the arm to promote blood return and avoid limb swelling. If swelling does not improve after 2 weeks, seek medical advice.
2. If there are signs of infection at the wound site, such as redness, swelling, warmth, or pain, seek medical treatment.
3. Feel the fistula daily with your hand to detect a "thrill" or vibration and ensure there is a sensation of blood flow.

4. Dressings should be changed daily to keep the wound clean and dry prior to wound healing.
 5. Starting the third day post-surgery, patients can begin squeezing a rubber ball or a soft tennis ball.
 6. The fistula should be assessed by a vascular surgeon 4-6 weeks after surgery, once the blood vessel walls have thickened and matured, to confirm it is functioning well before beginning any punctures. If the fistula has not matured as expected within three months, further surgery or angioplasty may be recommended.
1. 手臂抬高，促進血液回流，避免肢體腫脹，若2週後腫脹未改善，則建議就醫。
 2. 若傷口有「紅、腫、熱、痛」等感染現象，應就醫治療。
 3. 每天應檢查瘻管功能，用手觸摸瘻管是否有沙沙聲及血液流動的感覺。
 4. 傷口癒合前，應每日換藥並保持傷口的清潔乾燥。
 5. 動靜脈瘻管於手術後第三天可以捏握橡皮球或軟式網球。
 6. 動靜脈瘻管在吻合手術後，至少要4-6週且血管壁變厚成熟後，請血管外科醫師評估，確認功能良好，方可開始穿刺，若超過三個月仍未達預期成熟，建議進一步手術或血管成形術處置。

3. Routine Care for Arteriovenous Fistula:

三、動靜脈瘻管平時的照護：

1. Do not use the fistula arm for injections, blood draws, blood pressure measurements, or expose it to collision, compression, excessive bending, using it as a pillow, wearing tight sleeves, or lifting heavy objects.
 2. Manage fluid intake, avoid excessive dehydration and low blood pressure during dialysis.
 3. Use sterile gauze to apply pressure to the needle site to stop bleeding, without applying too much force. After 5-10 minutes, slightly relax the pressure until bleeding has stopped, then apply a bandage.
 4. Remove the bandage 24 hours after dialysis and keep the needle site dry.
 5. After 24 hours of dialysis, perform exercises to increase blood flow and pressure, accelerating vascular maturity, for at least 8 weeks.
- ◎Squeeze Ball Exercise: Squeeze a ball while pressing on the upper arm vein for 3-5 seconds, then relax. Perform for 15 minutes, 4-6 times a day.
6. Monitor for fistula function loss. If the thrill or flow sensation decreases or disappears, consider the possibility of fistula thrombosis and seek medical treatment early.
 7. In case of accidental cuts, apply direct pressure to stop bleeding and immediately go to the hospital if the fistula arm is cut and bleeds

heavily.

8. Apply warm compresses to the fistula to promote blood circulation, at 41-46°C (about the temperature of bath water), for 15-20 minutes. If reapplying, wait for an hour between sessions.
 9. Avoid scratching, keep the fistula and needle site clean with good hygiene practices, cleaning the skin around the puncture site with soap before each dialysis.
 10. Use elastic support for overly swollen fistula to prevent excessive blood flow that can lead to heart failure.
 11. Seek medical treatment for infection signs such as redness, warmth, pain, or swelling that lasts more than two weeks.
 12. Utilize cold and warm compress procedures for swelling due to missed needles, use ice for the day of swelling for 10-15 minutes, monitoring skin color and circulation. Apply warm compresses after 24 hours.
 13. Avoid repeated punctures in the same area, as this can cause endothelial damage, fibrosis, and vascular narrowing.
 14. Avoid smoking, which can cause vascular hardening. Keep the limbs warm to maintain good circulation.
1. 避免由動靜脈瘻管的手臂打針、抽血、量血壓、碰撞、壓迫、關節過度彎曲、睡覺時當枕頭用、穿袖子過緊衣物或用力提重物。
 2. 控制水份，避免透析中的過度脫水及血壓降低。
 3. 拔針後針孔處用無菌紗布加壓止血，不可太用力，約5-10分鐘後略可放鬆，待確實止血後貼上OK繃。
 4. 透析當天24小時後再移除OK繃，針孔處保持乾燥。
 5. 每次透析結束24小時後，做瘻管運動，可使血流量及壓力增加，加速血管的成熟，以下運動隨時可執行，持續時間至少8週以上。
- ◎握球運動：用力握球時同步按壓上臂靜脈，持續3-5秒後再放鬆，每次15分鐘，一天至少執行4-6次。
6. 當觸摸瘻管的沙沙聲及血液流動的感覺漸漸減弱或消失時，或觸摸只剩脈搏跳動之感覺，須考慮瘻管栓塞，應及早就醫治療。
 7. 若不小心割傷瘻管，大量出血時，應直接壓迫傷口止血，並立即到醫院求診。
 8. 透析前一天可適當的熱敷瘻管處，促進血液循環，溫度維持41-46°C (約平常洗澡水溫度)，每次熱敷時間為15-20分鐘，如需再熱敷需間隔1小時。
 9. 瘻管處及針眼周圍皮膚不可搔癢，保持良好衛生習慣，在每次透析前以肥皂清潔預穿刺周圍的皮膚。
 10. 當瘻管過度膨脹時可用彈性護套保護，防止血流過強，造成心臟衰竭。
 11. 穿刺部位若有紅腫熱痛或肢體腫脹超過2週…等感染跡象時，應就醫治療。
 12. 漏針或未打上時所造成的腫脹，當天使用冰敷，冰敷時間10-15分鐘，並注意皮膚

顏色與血液循環情形。24小時後用熱敷。

13. 避免每次都打在同一部位，會使血管內皮損傷，引起纖維化而導致血管狹窄。

14. 避免抽菸導致血管硬化，平時注意肢體保暖。

Self-Assessment (True or False questions)

- () 1. The arm with the arteriovenous fistula should not be used for injections, blood draws, or blood pressure measurements.
- () 2. It is necessary to check the arteriovenous fistula daily for blood flow sensation (a whooshing sound).
- () 3. Normally, it is not important to be aware of symptoms such as "redness, swelling, heat, pain," which may indicate infection.

自我評量(是非題)

- () 1. 動靜脈瘻管的手臂不能用來打針、抽血、量血壓。
- () 2. 每天都要自我檢查動靜脈瘻管功能，有無血流通過(咻～～)的感覺。
- () 3. 動靜脈瘻管平常不需要注意有無「紅、腫、熱、痛」等感染症狀。

1. (0) 2. (0) 3. (X)

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