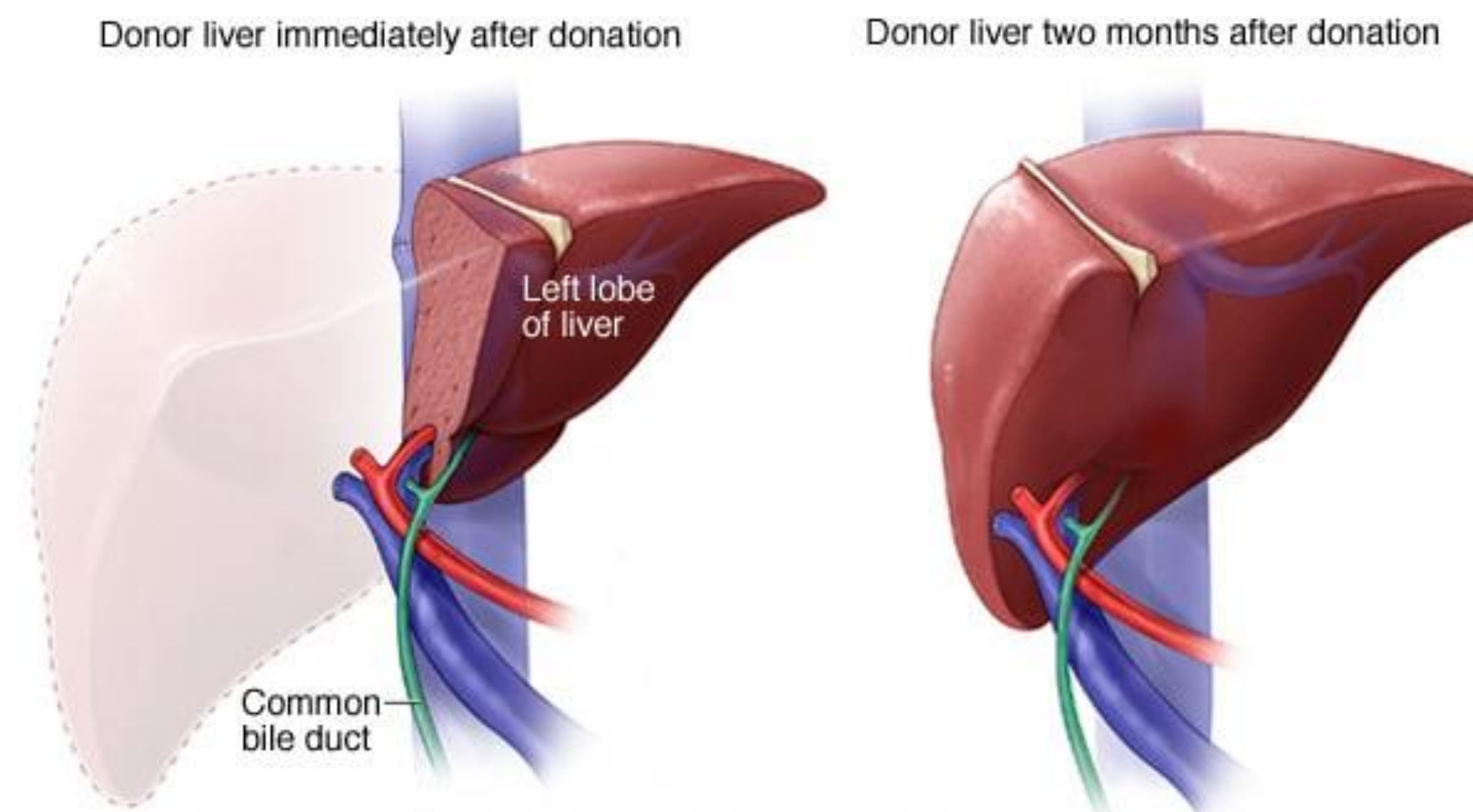


**Introduction**

- During the pre-surgical psychological evaluation, substance use is assessed to determine if the prospective donor is actively misusing a substance, therefore deeming them ineligible to donate without intervention
- Risk factors for developing substance misuse are indirectly assessed although they do not formally factor into the determination for a patient to proceed with living liver donation
- Anyone who proceeds with donation is automatically at a higher risk of developing alcohol use disorder (AUD) compared with the general population (Dew et al., 2019)
- Prospective donors who are donating to a family member with alcohol-related liver disease are at an even higher risk for developing alcohol misuse due to the genetic component of substance use disorders
- In a study completed by Butt et al., 8.4% of living liver donors endorsed symptoms of an alcohol use disorder within the first two post-donation years, more than any other surveyed psychiatric syndrome



**Discussion**

- There are no current guidelines that encourage the identification of risk factors for developing alcohol misuse in potential donors
- There are also no guidelines that outline the steps that can be taken to minimize liver donors' risk for developing AUD post-donation.
- The patient endorsed multiple risk factors that put him at a higher risk of developing AUD post-donation
- The patient is 2 months post-donation and has had one negative PEth since donation and denied alcohol use

**Conclusions**

- Alcohol use and risk factors for alcohol use should be closely monitored before and after donation
- Clear and consistent guidelines should be given to liver donors post-donation in regards to healthy drinking patterns
- Donors would benefit from additional education pre-donation regarding their risk for developing AUD and steps that can be taken to reduce their risk. This should be provided as part of the consent process so the donors can make an informed decision before proceeding with donation.
- Additionally, consistent education should be provided regarding alcohol reduction and safe alcohol patterns post-donation
- Use of biomarkers to identify sustained alcohol use, through the use of PEth testing, should be utilized. This can be completed during scheduled donor appointments for early identification of unhealthy drinking patterns.
- By taking additional steps pre- and post-donation, transplant centers may be able to minimize harm to donors' health

**Case Summary**

- 22-year-old Caucasian single male
- Interested in donating to dad who had alcoholic-related liver disease
- Pre-surgical psychological evaluation was completed as part of the living donor workup and including an evaluation of current/past substance use
- Endorsed test anxiety but otherwise denied a history of psychiatric symptoms
- Endorsed current binge drinking patterns for the last four years while in college
- Denied AUD criteria per the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
- Risk factors for developing alcohol misuse included: having a biological family member with a substance use disorder, experiencing peer pressure to drink, experiencing high levels of stress, residing in a family or culture where alcohol use is accepted, early drinking onset, being Caucasian, and being male (Sher et al., 2005)
- Denied all other substance use
- He was approved as a potential donor after he remained abstinent from alcohol as demonstrated by a negative PEth test

**Risk Factors for Alcohol Abuse**

History of or current psychiatric illness	Male gender	Caucasian
Previous substance misuse	Avoidance coping style	Poor interpersonal relationships
Availability and access to alcohol	Social or cultural norms approving use	Peers' usage of alcohol
Inherited predisposition to alcohol	History of a trauma	Early drinking onset
Low self-esteem	High level of stress	Impulsivity

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