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The Clinical Spectrum of Hepatic Encephalopathy

Announcer:

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Dr. Brown:

This is CE on ReachMD, and I'm Dr. Robert Brown from Weill Cornell in New York.

Here with me today is Dr. Steven Flamm from Rush University in Chicago.

Steve, what is the clinical spectrum of hepatic encephalopathy? And how can we differentiate between minimal, covert, and overt hepatic encephalopathy, or HE?

Dr. Flamm:

Those are excellent questions, Bob. Encephalopathy is a very, very difficult-to-diagnose condition at some points because it is a spectrum. It is a spectrum of cognitive dysfunction that happens in the setting of portal hypertension, usually from cirrhosis.

And why is it difficult? Because it can range from very mild deficits—increased fatigue, poor sleep, poor concentration, poor short-term memory—many symptoms that we even have, and we don't have encephalopathy. And it can range all the way to personality disturbances, confusion, slurred speech, abnormal behavior, to stupor, to even full-fledged coma.

Now, of course, it's not difficult to diagnose when it's very severe, but in the early stages, it is. Why is it important? Because encephalopathy gets worse, and encephalopathy leads to hospitalizations, and encephalopathy, of course, detracts from your quality of life. So it's very important for the clinician, for the healthcare provider, in the setting of portal hypertension, to diagnose even early encephalopathy and treat it appropriately.

Now, there are different terms when you're in this field, and some of the terms you mentioned—minimal, covert, and overt. Overt encephalopathy is what is not as difficult to diagnose. It's when patients have full-fledged symptoms, when patients do have personality changes, behavioral abnormalities, slurred speech. They have asterix on physical examination, and then again, it can range to stupor and coma.

What is harder are the earlier stages. Now, minimal and covert are 2 different terms, Bob, that I've actually seen slightly different definitions for, and I've written about this, and even when you look at the literature, there are slightly different definitions.

Minimal usually means what we call stage 0, which means there aren't any full-fledged clinical symptoms, but patients have very, very subtle problems when they have this. They have increased car accidents, increased traffic tickets; they fall more frequently; they have poor quality of life; their work performance is worse. You only, though, can diagnose this with special psychometric or neuropsychiatric tests, which we don't usually use in practice.

Now, this term is often synonymous with covert encephalopathy, although sometimes covert is also considered the very, very early encephalopathy where you do see some clinical changes, like fatigue and poor sleep and poor short-term memory and concentration.

But the early phases are very important to diagnose, Bob, because you want to watch patients, you want to counsel patients, and you may want to try to treat them.

Dr. Brown:

I think the first is you have to recognize, as you said, that the patient has cirrhosis and portal hypertension, and many cases of early cirrhosis may go unrecognized.

And then in those patients, I think the clinical pearl for the primary care provider is to ask some questions. They're not going to do detailed neuropsychiatric testing, but asking about sleep dysregulation rather than just giving them a prescription for a sleep aid. Is it really day-night reversal, where they're asleep during the day and awake at night? Asking whether they're able to concentrate on things that they used to be able to do easily are now hard, whether that's balancing the checkbook or doing a crossword puzzle. And then when in doubt, I think referral to someone with a higher level of expertise—if you think it's dementia, a psychiatrist or a neurologist; if you think it's liver-related, a gastroenterologist, hepatologist.

But I think the answer is, you've got it. It's hard, but we got to do it.

So I think we nailed it. Thanks for listening.

Announcer:

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