

Questions and Answers about Venous Occlusive Disease (VOD)

At the 42nd Annual Meeting of the EBMT a sponsored Nurses Group satellite symposium named VOD: Risk assessment, Identification and Response was held. The questions below were submitted by the audience and have been answered by the faculty after the symposium.

Faculty:

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	Question	Answer
Risk Assessment	Is iron on MRI a better assessment of risk than raised ferritin?	MRI assessment of iron overload is the gold standard for quantification of body iron. Ferritin is a simple and easy measure but alone is not sufficient when iron overload is important. However, a basic ferritin pre transplant will in the non-infected and well patient give a baseline for comparison at a later time and give an indication alongside other risk factors of the chance of VOD/SOS.

Monitoring	What is the best way to maintain accuracy of daily girths measurement?	<p>A baseline measurement of waist circumference from the beginning of hospitalization for patients at risk of VOD/SOS is recommended. Consistency can be achieved by the following procedure.</p> <ol style="list-style-type: none"> 1) Use a permanent marker and mark the patient's abdomen so that the measurement is consistently taken from the same place. 2) Use a tape measure and note the measurement on the patient's notes. 3) Take the measurement at the same time each day. 4) Pose the patient in the same position for every measurement. <p>Ref: Eisenberg S, Oncol Nurs Forum 2008;35:385-97</p>
Diagnosis	Is Day +28 post Haematopoietic Stem Cell Transplantation (HSCT) a later than usual onset of VOD?	<p>The median onset of VOD/SOS is day 12-14 and it usually occurs within 30 days after HSCT, but can also occur later.</p> <p>Ref: Dalle JH and Giralt SA. BBMT 2016; 22: 400-409, Arai S, et al. ASBMT/BMT Tandem 2016</p>
Treatment	Is it some risk to start defibrotide too early?	<p>Since VOD/SOS is a life-threatening disease, therapy must be started as soon as possible. Although defibrotide is not approved for prophylaxis or treatment of non-severe VOD/SOS, a prospective Phase 3 study noted reduced incidence in VOD/SOS in paediatric patients who received the drug in prophylaxis with a favourable safety profile. These results suggest that it is no increased risk in starting treatment early. In addition, clinical trials showed that once diagnosis is confirmed, treatment initiation within 2 days from diagnosis improves outcome compared to late initiation.</p> <p>Ref: Corbacioglu S, et al. Lancet 2012 Apr 7;379(9823):1301-9, Mohty M, et al. BMT 2015 Jun;50(6):781-9</p>
	Can you start defibrotide before confirming VOD?	See response above.

Can you give defibrotide prophylactically?

No, you cannot use defibrotide prophylactically outside of a clinical trial. Defibrotide is approved in the EU for the treatment of severe hepatic VOD/SOS in patients undergoing HSCT, and in the US for the treatment of adult and paediatric patients with hepatic VOD/SOS with renal or pulmonary dysfunction following HSCT. However, a prospective Phase 3 study noted reduced incidence in VOD/SOS in paediatric patients who received the drug prophylactically.

Ref: Defitelio® Summary of Product Characteristics

Corbacioglu S, et al. Lancet 2012 Apr 7;379(9823):1301-9

How long can defibrotide be given?

It is recommended that defibrotide is administered for a minimum of 21 days and continued until the symptoms resolve.

Ref: Defitelio® Summary of Product Characteristics

General

It is important to reduce total apports?

In the patient developing VOD/SOS it is important to carefully monitor intakes and outputs including hourly urine output and to restrict fluid because patient develop weight gain and ascites and respond poorly to diuretics. Fluid restriction includes giving intravenous drugs in the smallest amounts that may be safely delivered.

Paediatric patients For the paediatric patients, are symptoms and signs the same as in adults?

VOD/SOS in adults and children are similar but not superimposable. Therefore there are new EBMT diagnostic criteria that differentiate between adult and paediatric patients. Paediatric criteria have not been published yet but they will include a combination of symptoms including weight gain, hepatomegaly, ascites, raised bilirubin and platelet refractoriness.

Is the treatment the same for paediatric patients as for adults?

Defibrotide is approved in the EU for the treatment of severe hepatic VOD in patients undergoing HSCT, and in the US for the treatment of adult and paediatric patients with hepatic VOD with renal or pulmonary dysfunction following HSCT. Hence it is recommended by the EBMT and BCSH/BSBMT for the treatment of VOD in adults and children above 1 month of age at the same dose of 6.25mg/kg four times daily.

Ref: Defitelio® Summary of Product Characteristics