



## Sepsis and Septic Shock

micro drip study guide

December 25, 2021

Instructor: Dr. Christopher G. Byers, DVM, DACVECC,

DACVIM (SAIM), CVJ

## © 2021 Drip Learning Technologies LLC.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner. Printed in the United States of America

Be advised this document is here to enhance your learning experience and is a cumulative of the slides and transcript & area for your notes. You are welcome to take your notes electronically or print then use it to supplement your learning while watching the drip

## Veterinary Definitions Bacteremia • Presence of viable bacteria in bloodstream • Infection with concurrent evidence of systemic inflammatory response elife-threatening organ dysfunction caused by a dysregulated host response to infection • Septic Shock • Systemic inflammatory response to infection with hypotension refractory to volume resuscitation • Altered function of \$2 organs secondary to SIRS such that homeostasis can't be maintained without intervention

So we have four important terms.

Bacteremia simply means there's bacteria in the blood. Sepsis, on the other hand, is a much more complicated definition. Yes, there has to be infection. And yes, there needs to be SIRS. But we can't forget another part of this equation, so to speak. And that is there has to be an inappropriate or an inadequate host response to that infection that causes potential life-threatening dysfunction. So yes, there's the infectious organism, but there's also an inappropriate response from the host that causes potentially life-threatening dysfunction of vital organs.

If our sepsis progresses, our patients may develop septic shock, which is when they have hypotension that is refractory to appropriate volume resuscitation. So in that poll question, those of you that answered "septic shock" were correct.

And then lastly, we have to consider MODS, or Multiorgan Dysfunction Syndrome. In patients with MODS, our patients have to be experiencing at least two sources of organ system dysfunction so much so that it can no-- the patient can no longer maintain homeostasis.