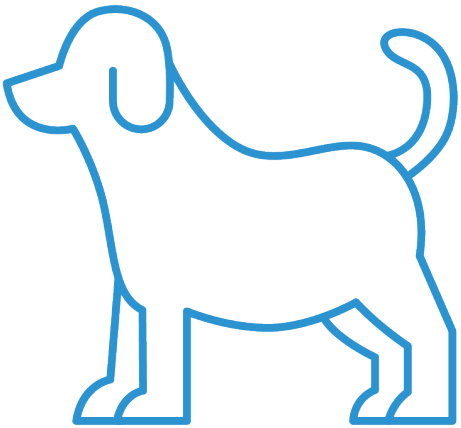
drip.vet



Canine Hypothyroidism

micro drip study guide

November 24, 2021

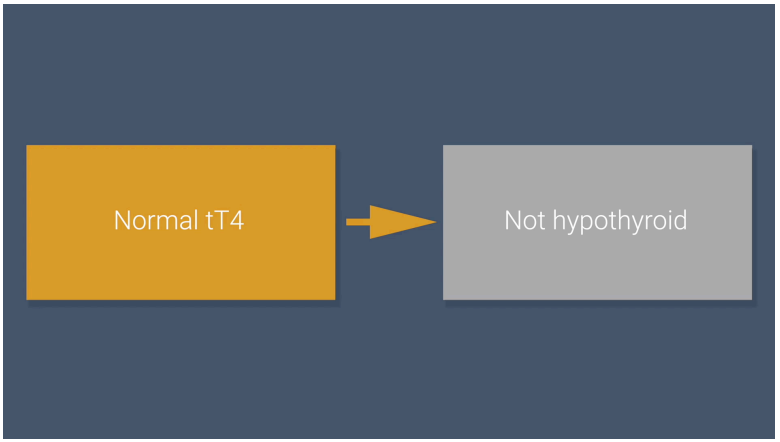
Instructor: Dr. Christopher G. Byers, DVM, DACVECC, DACVIM (SAIM), CVJ

© 2021 Drip Learning Technologies LLC.

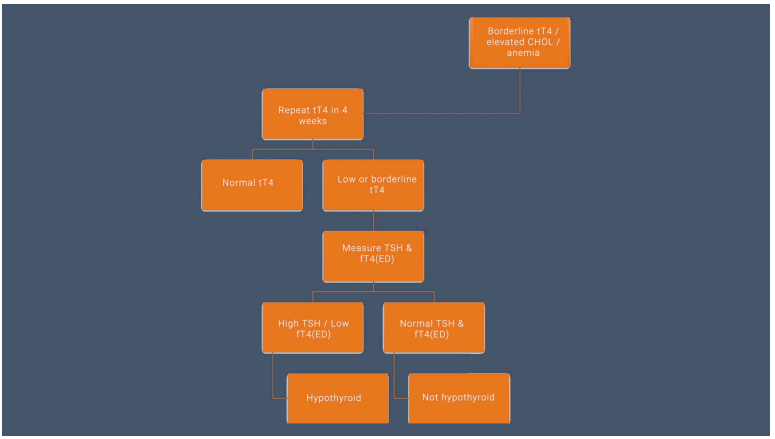
All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the copyright owner. Printed in the United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

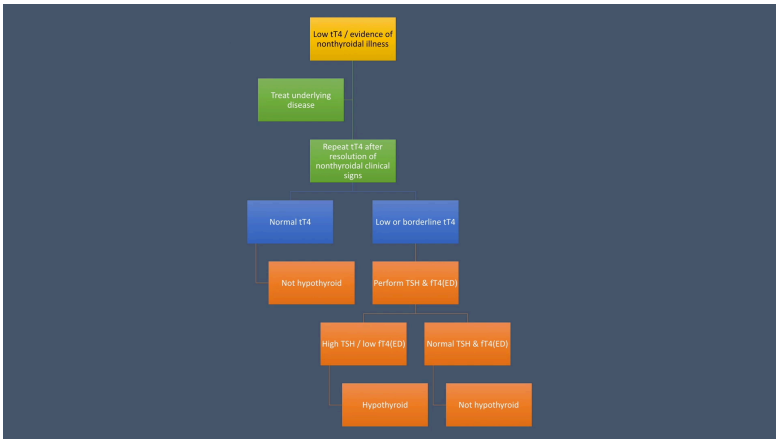
When we measure total thyroxine level as part of a preventative health care examination, we have several scenarios that could arise.So let's look at each one of them.



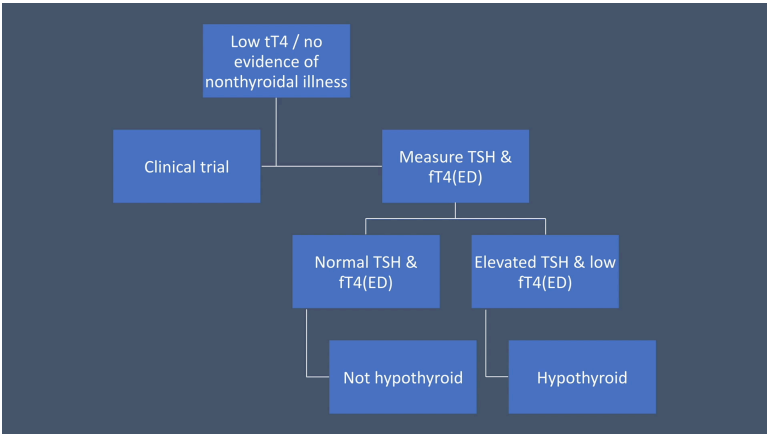
The easiest scenario is when the total thyroxine level is normal. If a patient's total thyroxine level is normal, they probably don't have hypothyroidism, and you can move on for all intents and purposes.



But what if the total thyroxine level is borderline low and you document other biochemical abnormalities like hypercholesterolemia or anemia? In these types of patients, reevaluating the total thyroxine level in four weeks is initially recommended. If the total thyroxine level is normal at that time, it would be appropriate to move on from hypothyroidism. However, if the total thyroxine level is persistently borderline or even low, it's now time to measure thyroid stimulating hormone and free thyroxine by equilibrium dialysis. If your TSH level is high and your free T4 by ED is low, then your patient has hypothyroidism, but if the TSH level and the free T4 by ED level are normal then your patient is not living with hypothyroidism at this time.



Let's look at another scenario. What if your total T4 level is low and your patient has evidence of nonthyroidal illness. Well the first thing you need to do is treat that underlying disease. Once you've effectively treated that underlying disease or at least brought it under control then you can remeasure total T4. If the total T4 level is now normal, move on. Your patient is not living with hypothyroidism at this time. However, if the total thyroxine level is persistently borderline or low, then it's time to measure TSH and free T4 by equilibrium dialysis. If TSH is elevated with a concurrently low T4 via ED then the patient is living with hypothyroidism and needs treatment. However if the TSH level is normal and free T4 is also normal that patient is not living with hypothyroidism.



Here's another scenario, what if your total Thyroxine level is low and you had no evidence of nonthyroidal illness? In this situation you actually have two options. The first option, not one that I'm a fan of but nevertheless it's an option you can perform a clinical trial with thyroid supplementation. The other option is to measure TSH and low fT4(ED) Again, if TSH is normal and free T4 (ED) is normal your patient is not living with Hypothyroidism at this time. However, if TSH is elevated and free T4 via ED is low then your patient has Hypothyroidism.