# **Hyperthyroidism and Diving**

Q: I am a 42-year-old female, about 20 pounds (9 kg) overweight for my height and age. I exercise regularly by riding my bicycle and using a stationary workout machine. About a year and a half ago I was diagnosed as having hyperthyroidism. As treatment 10 months ago, I received radiation therapy to my thyroid. I am currently taking Synthroid(r), and my thyroid hormone level has returned to normal. I have no restrictions on my activity, and I'm no longer experiencing the symptoms of hyperthyroidism.

I do have occasional fatigue, which neither my doctor nor I can explain. My husband and I usually dive twice yearly on vacation, but we haven't been diving in more than two years now. Are there any problems with diving on Synthroid or after receiving thyroid radiation therapy?

## An inquiry from Ohio

A: Participation in recreational scuba diving is usually considered unsafe for an individual with active, untreated hyperthyroidism. The thyroid is a vital organ that secretes a hormone that helps regulate body metabolism. In excess quantities, this hormone can increase heart rate, cause cardiac impairment and shortness of breath, alter body weight and cause severe anxiety. In untreated hyperthyroidism, thyroid hormone can be suddenly released in large quantities, causing acute symptoms that could be extremely debilitating if it were to occur in a submerged diver.

In your case, the overstimulation of the thyroid gland (hyperthyroidism) has been treated with a radioactive iodine that decreases thyroid function and reduces the quantity of hormone produced. After treatment of hyperthyroidism, thyroid hormone levels often drop below normal (called hypothyroidism), but the missing hormone can be replaced with L-thyroxine (Synthroid(r)), a synthetic substitute, restoring thyroid hormone levels in the bloodstream to normal. You may resume diving if your hormone levels are normal, if symptoms of hyperthyroidism have resolved, if you have no other health problems and you can achieve a suitable level of physical performance. Your unexplained fatigue may be a remaining hurdle, but, if approved by your doctor, a physical fitness program, including weight reduction, may help you return to your normal level of endurance.

#### To Dive or Not to Dive

Although untreated hyperthyroidism (like other illnesses and diseases) is disqualifying for scuba, treated hyperthyroidism without symptoms is not. The key to remaining in scuba diving with a diagnosed medical condition like hyperthyroidism is to follow the treatment prescribed by your physician, be monitored periodically and have regular check-ups. Questions?

Write to medical@daneurope.org

If you have a diving emergency, help is continuously available through the DAN 24-Hour Diving Emergency Hotline  $+39\ 06\ 4211\ 8685\ /\ +39\ 06\ 4211\ 5685$ 

## **Health Tips**

If you're not already involved in a health maintenance program, here are some suggestions to get started:

- Avoid or limit high-fat foods in your daily diet.
- Don't smoke.
- Use alcohol only in moderation.
- Participate in a regular exercise program at least three times a week.
- Seek the advice of your personal physician about lifestyle changes and frequency of check-ups.

#### The Cost and the Benefit

There is a financial cost for good health: Periodic doctor visits, lab tests and examinations are not free. Like scuba diving, however, your continued good health is a solid investment in an enjoyable future.

## **About the Author**

JOEL DOVENBARGER, Vice President of DAN America Medical Services, has been with DAN since 1985. A medical professional for 30 years, Dovenbarger started work as a registered nurse in 1976 and began in hyperbaric and diving medicine at the F.G. Hall Lab at Duke Medical Center in 1982.