KRESSER INSTITUTE
FOR FUNCTIONAL AND EVOLUTIONARY MEDICINE

HPA-D Treatment Lifestyle Review

Several of the primary considerations for behavior and lifestyle modification when addressing HPA dysfunction include:

1. REDUCE PERCEIVED STRESS

a. Take steps to reduce total exposure to psychological and emotional stress

b. Mitigate the harmful effects of stress we can't avoid.

There are a few behavior and lifestyle strategies you can provide to patients to improve chances of recovery.

Reducing the amount of stress you experience

- Learn to say "no."
- Avoid people who stress you out.
- Go on a news fast, or at least limit your exposure to the news.
- Give up pointless arguments, and agree to disagree.
- Limit your to-do list.
- Stop Internet debating.

Strategies for decreasing stress

- Reframe the situation. Look at it in a more positive light or in a different context.
- Lower your expectations. "Don't let the perfect be the enemy of the good."
- Practice acceptance. Accept the things we can't change.
- Be grateful.
- Cultivate empathy.
- Manage your time.

General tips for stress management

Stress management is vitally important. It starts with a commitment to yourself. Taking time for yourself helps you to be the best mother or father, spouse, friend, employee, employer, or person overall that you can be.

Stress management practices

- Mindfulness practice (Mindfulness-based stress reduction, or MBSR)
- Meditation
- Yoga
- Tai chi
- Qi gong
- Biofeedback, a mind-body technique that helps teach patients how to influence their autonomic nervous system.
    - HeartMath is an example.

2. CONTROL LIGHT EXPOSURE

a. Two main issues are too little exposure to natural light during the day and too much exposure to screens (i.e., blue light) at night

b. Minimize computer, tablet, and phone use to two to three hours before bedtime

   i. Tools to minimize: f.lux, Night Shift in iOS 9, orange-tinted glasses, dim/cover/remove any lights in bedroom, blackout shades, and eye mask.

c. Increase light exposure during the day, and get 15 to 30 minutes of bright light exposure daily.

   i. Consider a walk outdoors earlier in the day without sunglasses

   ii. If it's dark in the morning when you wake up, you could consider buying a light machine that emits 10,000 lux of light and sit in front of it for 15 to 20 minutes.

Shift work

- Advise your patient to avoid rotating shifts (working night shift two or three times a week and then the day shift two or three times a week) because it is almost impossible for the body to adjust to alternating shift work.
- If your patient works a regular night shift, advise as regular of a routine as possible.
    - Wear the orange glasses when they get home from work.
    - Use blackout shades in the room.

- Encourage regular mealtimes.

- Consider a career change if necessary.

Traveling across time zones

- A few days before the trip, start taking a low dose (250 mcg to 1 mg) of melatonin.
- Shifting mealtimes a few days before can ease the transition.

3. OPTIMIZE SLEEP HYGIENE, DURATION AND NUTRITION

a. Explain the importance of sleep to your patient
   i. Most people should aim for at least eight hours of sleep a night
   ii. Specifically, how much sleep do you need?
   iii. Dr. Alex Borbely's two-process model indicates to allow more time in bed for sleep than you need, and then you see when you wake up without an alarm clock. See **https://chriskresser.com/how-much-sleep-do-you-need/**

b. Sleep hygiene. Create an environment that is conducive to sleep.
   i. Use your bedroom only for sleep and sex.
   ii. Create a pleasant and relaxing environment in the bedroom.
      1. Invest in a comfortable bed.
   iii. Try to avoid emotionally upsetting conversations/activities right before bed.
   iv. Reduce noise level.
   v. Avoid working and using electronic media in the bedroom.
   vi. Don't bring your phone into the bedroom.
   vii. Be careful with additive books before bed.

c. Sleep nutrition
   i. People with digestive issues often do better with light dinners.
   ii. People with hypoglycemia do best with late snacks.
   iii. Low-fat and low-carb diets can cause insomnia; experiment with macronutrients when insomnia is a problem.
   iv. Balance your intake of muscle meats and eggs with fatter cuts of meat and bone broth to promote the uptake of tryptophan and production of serotonin and melatonin in your brain, which help with sleep.
   v. Avoid stimulants such as caffeine after noon or earlier.
      1. Even if patients do not feel overstimulated in the immediate moment after drinking caffeine, it could still be adversely affecting their sleep.
      2. It can have a cumulative effect.

4. OPTIMIZE PHYSICAL ACTIVITY

a. Aerobic exercise has antidepressant and antianxiety effects and protects against the harmful consequences of stress, in addition to physical benefits.

b. Avoid overtraining

   i. Signs include insomnia, anxiety, muscle soreness, waking up tired, poor exercise tolerance or recovery, decline in performance, and brain fog

   ii. In general, you should feel better and more energized after exercise and the next day

c. Heart rate variability monitor (HRV)

   i. Helps to better manage recovery by providing an estimate of when we're overly stressed versus well recovered.

   ii. A decrease in the variability of the heart rate is a sign of stress. When you wake up in the morning, measure your HRV. If it's low, then you would do less that day.

   iii. If you wake up and you have more variability in your heart rate, you could do more.

   iv. Both iOS and Android have software and hardware components that can be used. Two popular brands are BioForce HRV and ithlete.

5. SPEND TIME OUTDOORS TO CONNECT WITH NATURE AND FOR NATURAL LIGHT EXPOSURE.

6. REGULAR PLAY AND PLEASURE AND SOCIAL SUPPORT.