



# ADHESIVE ARACHNOIDITIS (AA)

## Bulletin 9

### February 2020

## **PERSONS WITH AA AND EHLERS-DANLOS SYNDROME NEED AN ADRENALINE AGENT (“STIMULANT”) FOR PAIN CONTROL**

In this era of opioid controversy and tragedy due to forced opioid reductions, the scientific information on adrenaline-type agents can help control constant, intractable pain and help reduce opioid use.

Overlooked in the opioid controversy is the key point that an adequate supply of adrenaline-related neurotransmitters – dopamine and norepinephrine – are necessary in the brain and spinal cord for pain relief. Unfortunately, constant, intractable pain depletes the natural supply of endorphin, dopamine, adrenaline, and noradrenalin and levels must be replaced to adequately control pain.

### Simple Facts

1. Persons with a severe, intractable pain condition like AA and/or a genetic connective tissue disorder like Ehlers-Danlos will need an adrenaline agent, normally called a stimulant, for pain control, maximal function, keeping opioid dosages stable and not escalating the daily opioid dosage, and preventing sedation and overdose.
2. Adrenaline agents have long been known to boost or potentiate opioids, enhance pain relief, and allow less opioid to be used. A study by this bulletin’s author found that the simultaneous use of a stimulant and clonidine lowered opioid dosage by 30 to 50%.

### Not New

Physicians at the London Brompton Hospital found, in the 1920’s, that a stimulant was a necessary ingredient in the famous “Brompton Cocktail” for relief of severe pain. Modern pain relief agents called “compounds” always add the stimulant, “caffeine”, to make the codeine or oxycodone more potent.

### Myth

Most observers believe that an adrenaline agent given to an intractable pain patient will automatically raise blood pressure and pulse rate. This is generally a myth, because the person with intractable pain depletes their reserve of dopamine, noradrenalin and adrenaline. The use of an adrenaline agent will serve to replace these depleted neurotransmitters and will not generally cause blood pressure and pulse rate to rise. Periodic monitoring is, however,

recommended to be continued. An initial echocardiogram is recommended to rule out potential aortic complications from stimulants in those with EDS of other connective tissue diseases.

### Multiple Benefits

A person with intractable pain due to AA, EDS, RSD, or other severe and tragic condition will usually have the following conditions – all of which will benefit by an adrenaline agent.

Weight Gain	ADHD – Attention Deficit Disorder
Depression	Sedation
Fatigue	Memory Loss

### New Discovery – Descending Pain

Recent research has revealed that constant, intractable pain establishes a “biologic battery” in the brain and spinal cord. This “biologic battery” sends electric currents down the autonomic (non-spinal cord nerves) nervous system. Symptoms include excess heat, muscle spasms, jerking, tremors, sweating, and “all-over” pain. In contrast to other forms of pain, descending pain isn’t well controlled by opioids and anti-inflammatory agents. Only adrenaline agents stop it. The drugs clonidine and tizanidine are less effective.

<b><u>SOME ADRENALINE AGENTS FOR PERSONS WITH AA AND EDS</u></b>	
Phentermine	Adderall®
Phendimetrazine	Methylphenidate
Dexedrine	Modafinil

### References

1. Dalal S, Melzack R. Potentiation of opioid analgesia by psychostimulant drugs: a review. J Pain symptom Manage 1998;16(4):245-253.
2. Millan MJ. Descending control of pain. Prog in Neurobio 2002;66:355-474.

Entire bibliography on request.

**Special Note:** Every person with intractable pain due to AA, EDS, RSD, cancer, or other painful disease, should educate themselves on adrenaline agents and discuss them with their medical practitioners in order to either lower their opioid dosage or keep it from escalating. Simply stated, a person with intractable pain needs at least a small dose of an adrenaline agent for pain relief and optimal function.