



THE TREATMENT OF ADDICTION

Steven G Weaver MD FASAM

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DISCLOSURES

I have no disclosures

Qualifications

- ▶ FHU: 1980-1985
- ▶ UTCHS: 1985-1989
- ▶ INTERNSHIP: INTERNAL MEDICINE : 1989-1990
- ▶ USN/USMC: 1990-1994
- ▶ RESIDENCY: INTERNAL MEDICINE 1994-1996
- ▶ CPE: 2007
- ▶ HOSPITALIST
- ▶ LPC/MHSP
- ▶ BOARD CERTIFIED IN ADDICTION MEDICINE AND INTERNAL MEDICINE

OBJECTIVES

- ▶ List the methods to treat addiction
- ▶ Describe the history of Medication Assisted Recovery (MAR)
- ▶ Understand the pathophysiology of MAR in OUD

TREATMENT FOR ADDICTION

- ▶ Kill Addicts
- ▶ Lock all addicts up
- ▶ Prohibition
- ▶ Psychosocial Treatment
- ▶ Pharmacotherapy

PHARMACOTHERAPY

▶ Also known MAT (medication assisted treatment)

▶ Alcohol

- ▶ Disulfiram
- ▶ Naltrexone
- ▶ Acamprosate

Tobacco

Nicotine Replacement Therapy

gum, patches, spray, inhaler, lozenges

Bupropion and Varenicline

HISTORY OF MAT

- ▶ Cocaine to treat morphine addiction
 - ▶ Sigmund Freud 1884 *On Coca*

HISTORY OF MAT

- ▶ William Halstead “Father of American Surgery”
 - ▶ His personal physician was William Osler, cofounder of John Hopkins
 - ▶ Osler treated Halstead’s cocaine addiction with morphine
 - ▶ Halstead was addicted to morphine the rest of his life

HARRISON NARCOTIC ACT OF 1914

- ▶ Initially the act stated ONLY physicians could write opioids
- ▶ Then the act was changed to say physicians could not write opioids to known opioid addicts

HARRISON NARCOTIC ACT

- ▶ 1919 Webb Decision Supreme Court
 - ▶ Criminalized possession and use of opioids
- ▶ Criminalized doctors who prescribed opioids to addicts

HARRISON NARCOTIC ACT

- ▶ 25,000 physicians were prosecuted under the Harrison Act
- ▶ 3000 physicians WENT TO JAIL!!!! (Memphis)
 - ▶ Result: Physicians stopped treating addiction and avoided addicts

REASONS FOR MAT WITH OUD

- ▶ Harm Reduction
- ▶ Bridge to recovery

NALTREXONE

- ▶ Weakness
 - ▶ Cravings continue
 - ▶ Large number of people relapse during the washout period
- ▶ Very useful in certain populations
 - ▶ Healthcare professionals
 - ▶ Business Executives
 - ▶ Drug courts

NALTREXONE VS NALOXONE

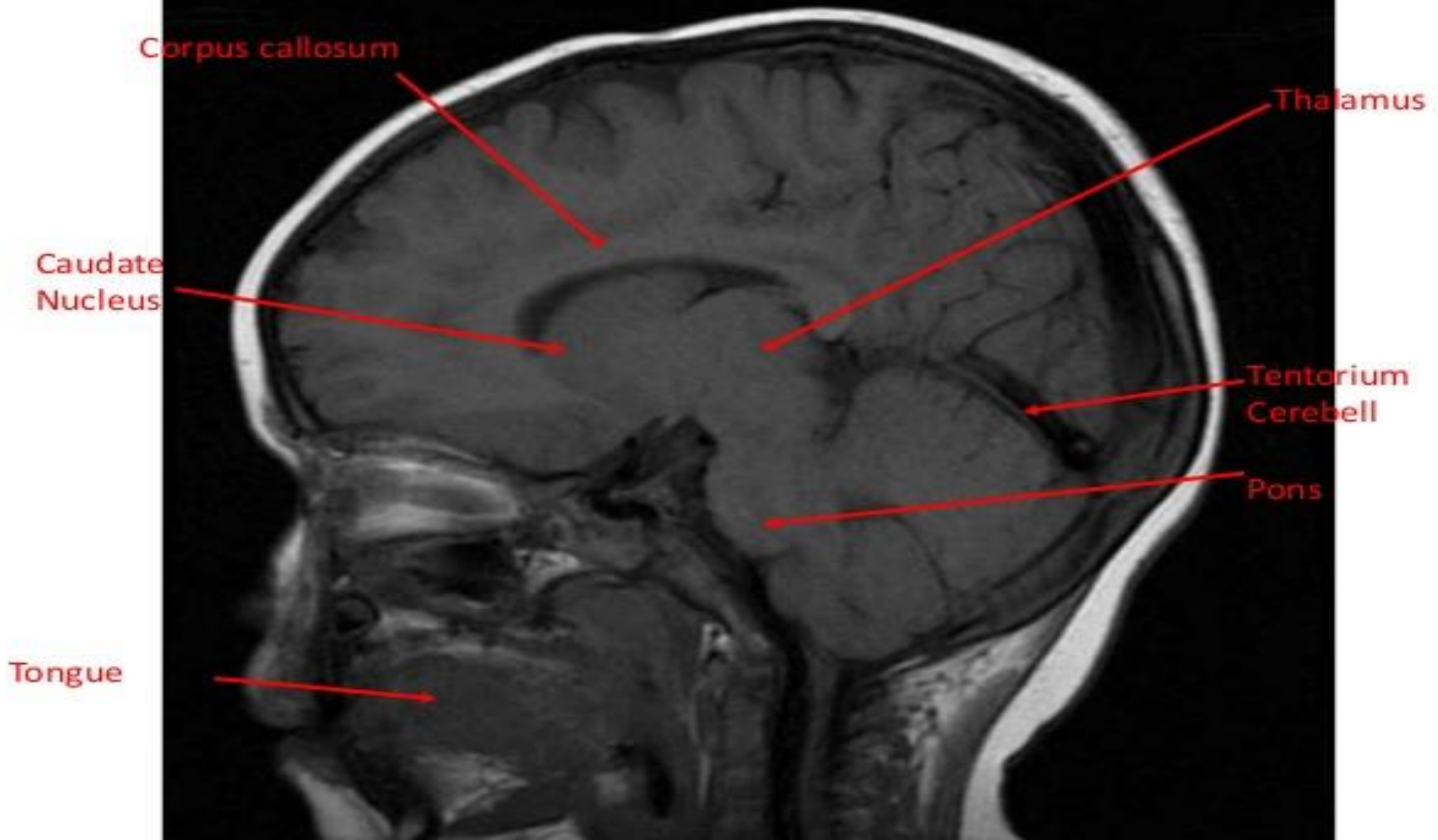
- ▶ Both are Mu receptor blockers

- ▶ Naloxone

- ▶ Rapid onset
- ▶ Short acting
- ▶ No po bioavailability
- ▶ Acute overdose
- ▶ IV, SQ, IM, Intranasal

- ▶ Naltrexone

- Delayed onset
- Long acting
- Bioavailable po
- Used to treat OUD
- IM(vivitrol) or PO(Revia/Depade)



Corpus callosum

Thalamus

Caudate Nucleus

Tentorium Cerebelli

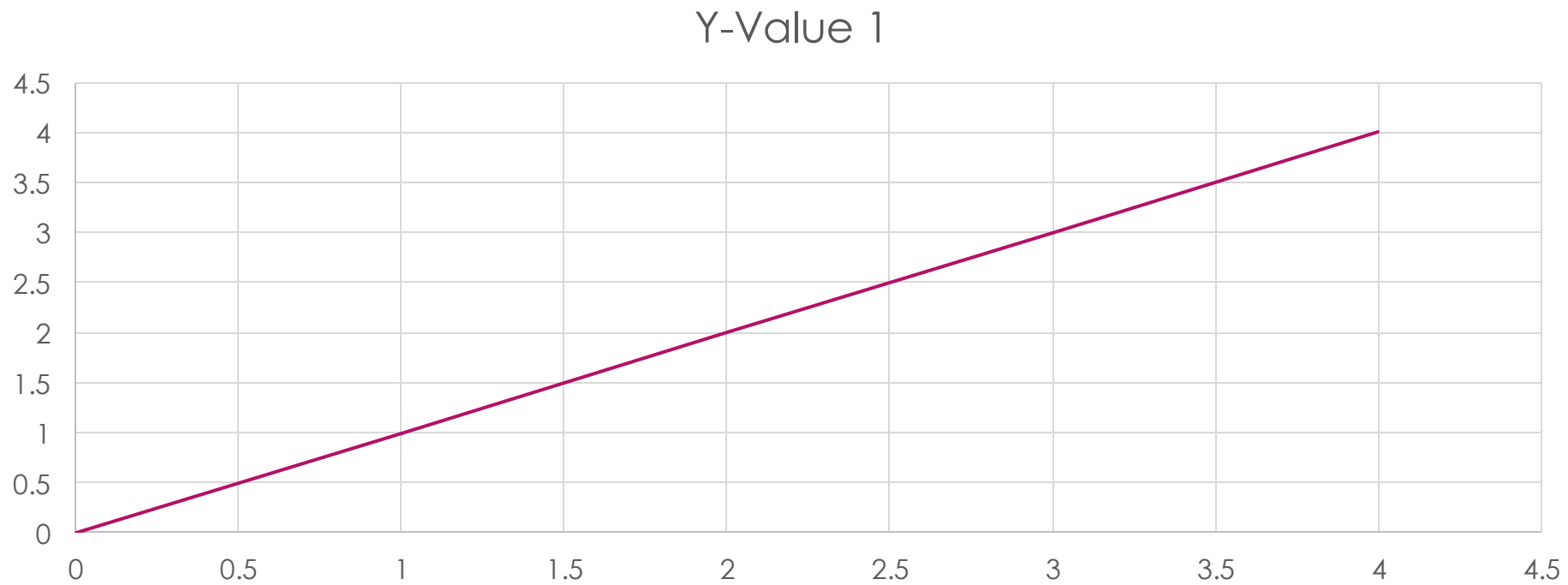
Pons

Tongue

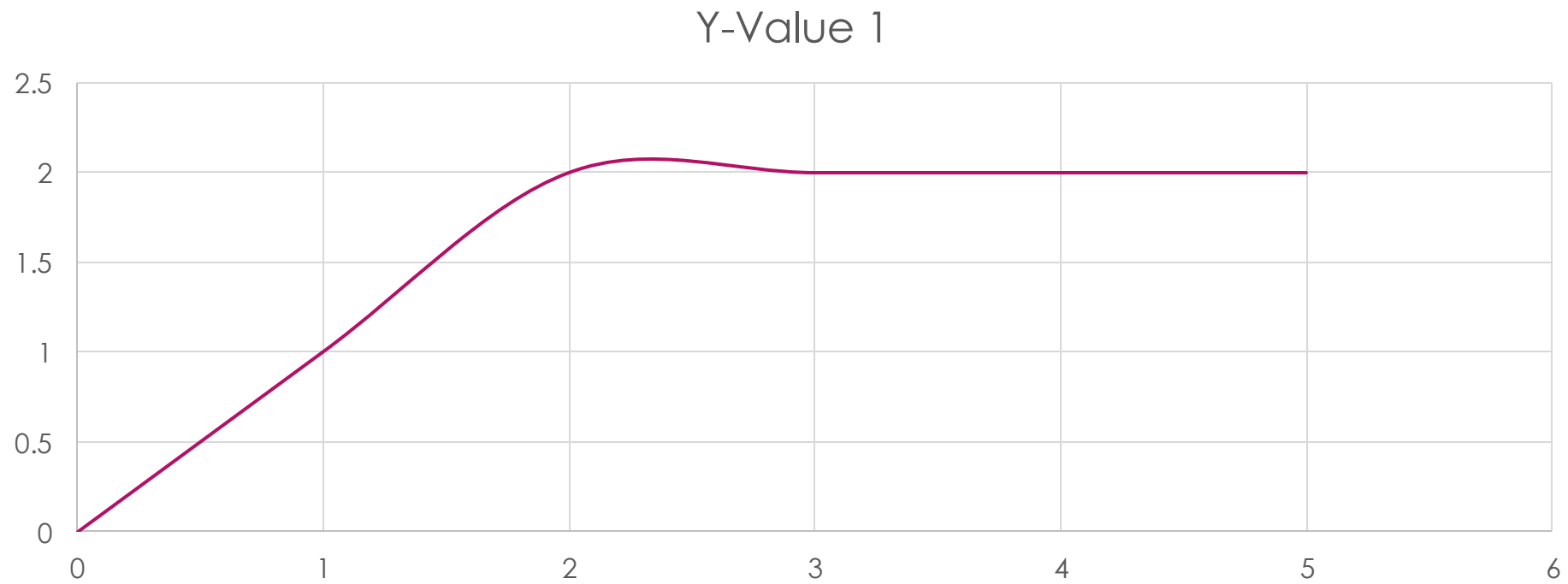
MAT FOR OPIOID USE DISORDER

- ▶ Full Agonist
 - ▶ Methadone....OTP
- ▶ Full Antagonist
 - ▶ Naltrexone
- ▶ Partial Agonist
 - ▶ Buprenorphine

HOW A FULL AGONIST WORKS



PARTIAL AGONIST



BUPRENORPHINE

- ▶ DATA 2000
 - ▶ Allowed physicians for the first time since 1915 to treat OUD in the office

FORMULATIONS OF BUPRENORPHINE

- ▶ Buprenorphine(subutex)

FORMULATIONS OF BUPRENORPHINE

▶ NARCAN ADDED

FORMULATIONS OF BUPRENORPHINE

- ▶ Buprenorphine-naloxone

- ▶ Suboxone

- ▶ Bunavail

- ▶ Zubsolv

FORMULATIONS OF BUPRENORPHINE


▶ Kleenex

CASE STUDY

- ▶ Sally M is a 34-year-old woman from West Tennessee. Her father was an alcoholic and her mother was addicted to heroin. Her mother died of an overdose when Sally was 12. Her father moved them in with her paternal grandparents after her mom's death. Shortly thereafter her adult uncle began abusing her sexually which continued until she was 16 when she left home and moved in with her boyfriend to escape the abuse. She had her first child when she was 17. She eventually married her boyfriend even though he routinely beat her. At the age of 20 he beat her so badly she spent 2 months at the MED and he went to prison. She began using drugs at age 12. Thru the years she has used marijuana, opioids of all kinds including IV heroin, methamphetamine, cocaine and alcohol. Her DOC however is definitely opioids.

CASE STUDY

- ▶ She managed to get an AA degree in her early 20's and has worked in a factory for the last 8 years. Originally, she worked on the line but when I first met her, she worked in the accounting department. She has 3 kids who are 17, 12 and 6.
- ▶ In 2012 she weaned herself off IV heroin by using oxycodone she bought off the street. She has been using oral pharmaceutical opioids since.
- ▶ She tested positive on a random drug screen at her workplace in 2014. Instead of firing her the HR manager, who is a friend of mine, referred her to me for options. I started her on buprenorphine. Initially she was not interested in counseling, but she relapsed at 6 months, and I convinced her to try counseling. She did very well in counseling especially with the use of EMDR. She stayed on buprenorphine for 2 years and came off the medication in 2016. She has remained in recovery since and is active in her local NA group which is a pro MAT group.

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- ▶ In 2016 she went back to school and in 2018 she got her BS in Accounting
 - ▶ In 2021 she completed her MBA
 - ▶ She is now the comptroller in the same company where she used to work on the factory line

METHADONE

- ▶ Germans: WWII
- ▶ Vietnam
- ▶ Drs Dole, Nyswanger and Kreek...early 60's
- ▶ This marked the remedicalization of treatment of OUD
- ▶ Initially Dole was just interested in harm reduction
- ▶ 1971