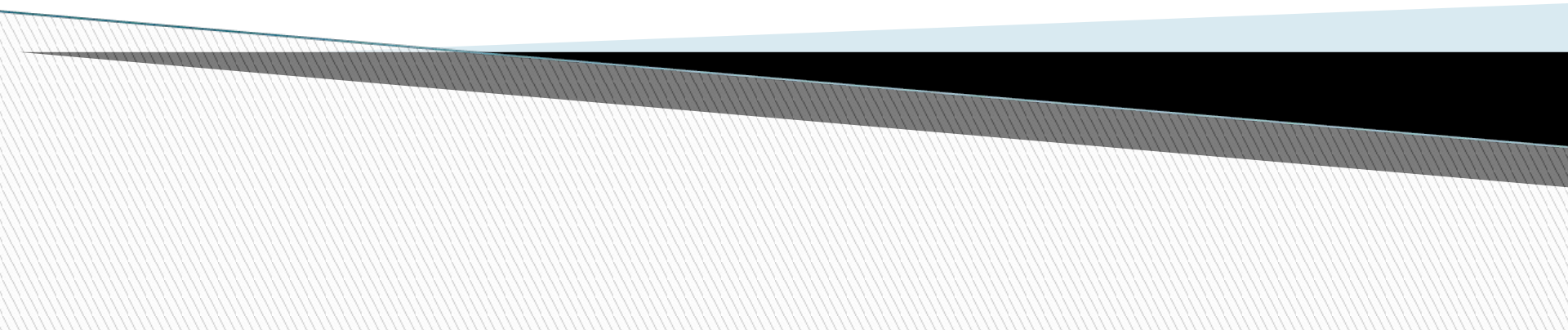
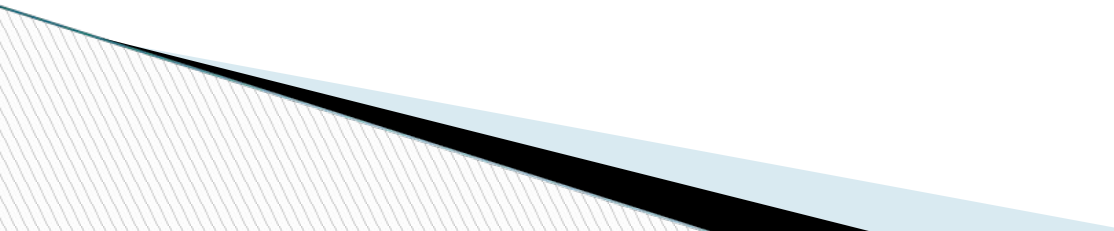


# CBD IN MIGRAINE HEADACHE

DR EBRAHIM POURAKBAR  
NEUROLOGIST



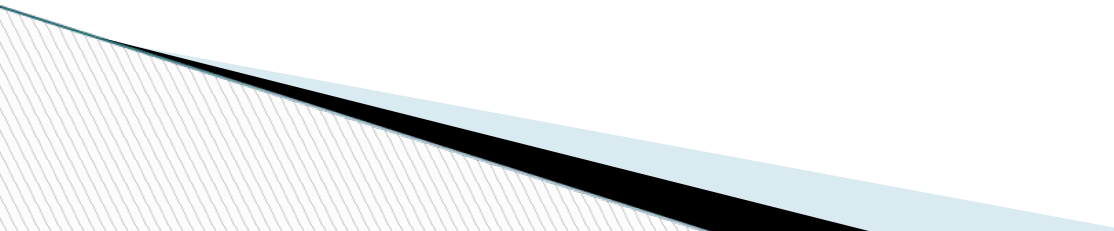
# HEADACHE

- ▣ TYPES
  - ▣ CLINICAL SYMPTOMS
  - ▣ PATHOPHYSIOLOGY
  - ▣ HISTORY OF CANNABIS CONSUMPTION
- 

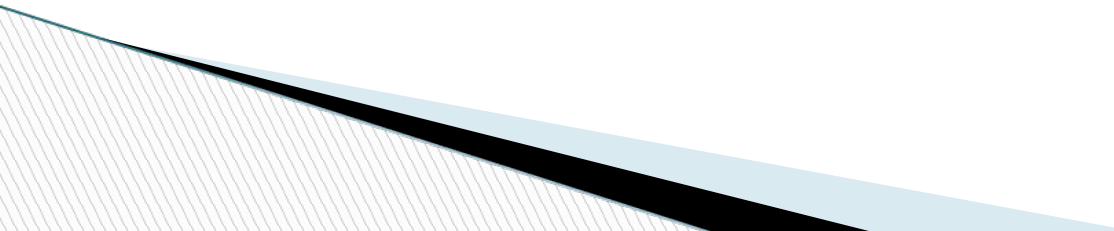
# CANNABIS AND HEADACHE-1

- Historical reports , though not ideal forms of evidence , are important resource for understanding the potential use of cannabis in tx of headache
- Historical sources indicate that cannabis was used as an effective prophylactic and abortive tx for headache

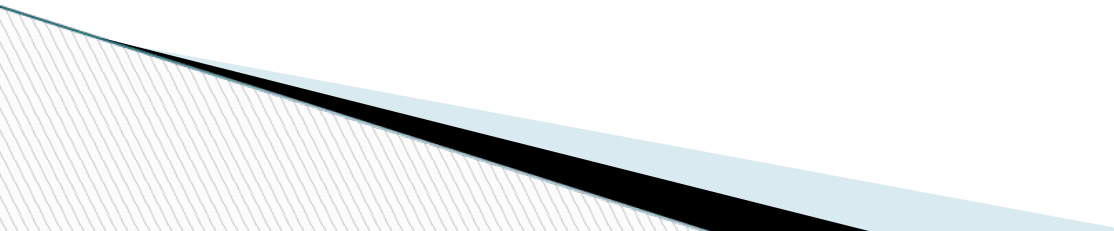
# CANNABIS AND HEADACHE -2

- Early reports of cannabis for tx of headache appear to be largely positive with many patients experiencing a decrease in the frequently and intensity of the headache episode .
  - In some cases headache was cured entirely even after cannabis discontinuation
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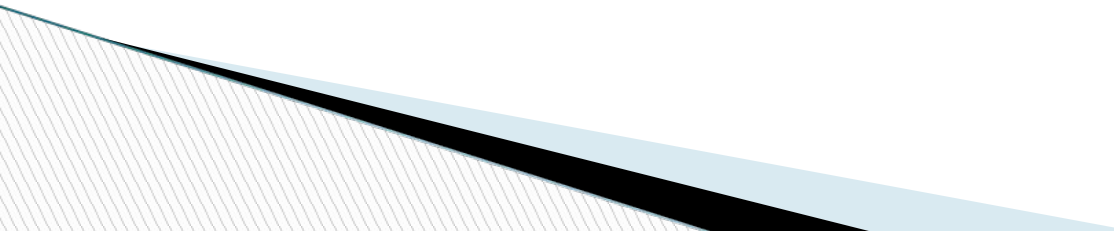
# CLINICAL STUDIES ON CANNABIS USE FOR HEADACHE-1

- Currently there are no placebo-controlled clinical trial examining the use of cannabis for headache , nevertheless there have been a number of other studies published that give insight into its therapeutic efficacy .
  - Case studies and self reports may have a bias toward immediate improvement without awareness of possible dependence , rebound or withdrawal response
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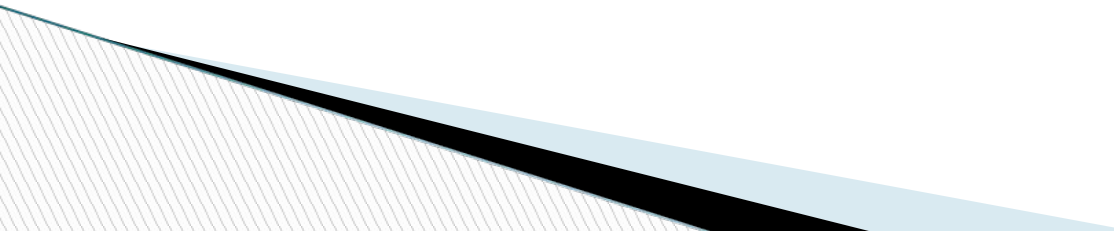
# CLINICAL STUDIES ON CANNABIS USE FOR HEADACHE-2

- ▣ Studies show that headache can be induced in 23% of patients undergoing cannabis withdrawal
  - ▣ In some studies cannabis was superior to betablockers and opiate and ergots in migraine prophylaxy and abortive therapy
  - ▣ In one study dexamabinol a synthetic cannabinoid has been found to relieve intracranial pressure and improvement after TBI.
  - ▣ In some case reports complete resolution of headache with smoking cannabis without recurrence
- 

# CLINICAL STUDIES ON CANNABIS USE FOR HEADACHE-3

- ❑ In one survey 70% found relief from trigeminal neuralgia and 90% found chronic pain relief .
  - ❑ In one clinical trial nabilone a synthetic cannabinoid mimicking THC was superior to ibuprofen in reducing pain intensity and , analgesic intake and quality of life .
  - ❑ Cannabis was reported to provoke cluster headache attacks in 22% of patients
  - ❑ One case report showed pain recovery in pseudotumor cerebri
- 

# CANNABINOIDS AND HEADACHE PATHOPHYSIOLOGY

- ▣ Preclinical data demonstrating the effects of endocannabinoids on in modulating several major components of migraine pathogenesis :
    - 1-Decreased expression of the *cnr1* gene which encodes the cannabinoid receptor type 1(CB1)
    - 2-women with migraine have increased activity of enzyme FAAH use to degrade endocannabinoids
    - 3-CSF analysis have shown decreased AEA and increased levels of CGRP and NO
- 



# CANNABINOIDS AND HEADACHE PATHOPHYSIOLOGY-2

- 4-Endocannabinoid deficiency hypothesis provide explains comorbidities such as anxiety and mood disorders ,allergies and chronic pain disorders and epilepsy.
- 5-endocannabinoids supress the glutamate signaling and CSD .
- 6-ECB levels is decreased in platelets of migrainers
- 7-ECB prevent release of serotonin in platlets during migraine
- 8-ECB inhibit trigiminovascular nociceptive processing

# TAKE HOME MESSAGE

- Although there are historical experiences of CBD in migraine treatment and according to the preclinical literature there are evidences of cannabinoids positive effects on migraine headache , we need placebo-controlled trials to appropriately determine efficacy.
- 