**OBJECTIVES**

- To compare cognitive functioning in 3 groups: (FEP THC+, FEP THC- and Controls), and determine if this cognition is associated with NGF and BDNF levels.

- To evaluate the influence of NGF and BDNF in functionality in FEP patients with and without cannabis use in 1 year follow up and to determine the utility of these neurotrophic factors as prognosis markers of functioning.

**METHODS**

- We collected 136 subjects aged 15-25 years. Paired by gender and age.
  - 32 FEP THC+
  - 36 FEP THC-
  - 68 Controls.

- We evaluated cognition through different domains: memory, executive functioning, learning and working memory.

- We used a lineal regression model to evaluate the influence of NGF and BDNF levels on functioning during the follow up.

**RESULTS**

**COGNITION**

- NGF was not related to cognitive domains.

**FUNCTIONALITY**

- NGF basal levels were significantly related to Strauss Carpenter scale punctuation (p=0.01) in FEP THC+, not finding the same in non users patients.

- BDNF basal levels also showed a statistically significant relationship with functionality one year after the onset of the illness (p=0.011) in FEP THC-. In FEP THC+ patients, NGF basal levels could be a prognosis marker of functionality 1 year after the onset for cannabis users patients.

**CONCLUSIONS**

- NGF could have an important role in the mental illness physiopathology related to cannabis use, including FEP.

- FEP patients have worst cognition than controls and that it is related to BDNF, especially in non-cannabis users.

- Neurotrophic factors related to prognosis are different in users and non-users.
  - NGF basal levels could be a prognosis marker of functionality 1 year after the onset for cannabis users patients.
  - Basal BDNF levels could be useful as prognosis marker of functionality in non-cannabis users FEP.

- These conclusions also could lead to different treatment choices, which should be individually decided.

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**P.3.b.018.** Longitudinal study of the influence of neurotrophics factors (NGF and BDNF) in first psychotic episodes with and without cannabis use. Functionality and cognition in 1 year follow up.

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It is known that neurotrophins are altered in First Psychotic Episodes (FEP), specially BDNF. There is also data suggesting that the use of cannabis decreases other neurotrophin: NGF [1].

**Our hypothesis is that patients with FEP who use cannabis, have a different prognosis due to neurotrophin alteration in comparison with FEP patients that do not use cannabis [2][3]**

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**BDNF levels are higher in FEP THC+**

**NGF levels are higher in FEP THC-**