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INTRODUCTION

Cognitive deterioration is the common phenomenon noticed in myeloma patients. Causes of this impairment can be primary related to age or biology of the disease, but on the other hand can appear due to therapy adverse effects, coexisting infections, anemia, nutritional deficit and many other reasons. Aim of this study was to determine cognitive impairment in myeloma patients especially in correlation with anemia.

CONCLUSION

- Early assessment and follow up of cognitive functions in myeloma patients, well-managed treatment of comorbidities and therapy adverse events may play a key role of cognitive function preservation and all interventions directed towards improving or preserve cognition should be a part of supportive care in myeloma patients
- CRD equipment showed great sensitivity and specificity and we are planning to incorporate it in everyday clinical practice and supportive care for our myeloma patients.

MATERIALS

Cognitive function assessment:

Complex Reactimeter Drenovac (CRD)

chronometry based computational tests (measuring convergent thinking, spatial visualization, visual orientation, learning and memory, operative thinking, reaction on sound, reaction on light)

RESULTS

- Patients with **multiple myeloma and anemia** show the **longest time necessary to complete test**
- Patients with **multiple myeloma in absence of anemia** have also **longer time** to complete the test than the patients with anemia and healthy participants
- Time necessary to complete CRD11 test and other **cognitive performances were significantly improved after correction of anemia**

METHODOLOGY

- **14 newly diagnosed, therapy naive myeloma patients**
- **Four groups:**
 - group 1: **multiple myeloma and anemia**
 - group 2: **multiple myeloma in absence of anemia**
 - group 3: **anemia in absence of multiple myeloma**
 - group 4: **healthy participants**
- Data analysis:
 - Microsoft Excel (Microsoft Office)
 - Statistica v10.0 (StatSoft Inc., Tulsa, Oklahoma, United States)