LIPOSOMAL IRON IS BETTER THAN IRON SULFATE IN LOW-RISK MYELODYSPLASTIC SYNDROMES (LR-MDS) WITH MILD ANEMIA. MONOCERNTRIC STUDY.

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BACKGROUND
LR-MDS frequently shows a chronic inflammatory status, ferritin high values and impaired capacity of iron absorption and utilization. Liposome has a described anti-inflammatory effect and transports its content directly in blood, beyond gastric and enteric wall.

AIM
Aim of this study is to verify if liposomal iron support in refractory anemia (RA) and refractory cytopenia with multilineage dysplasia (RCMD) with mild anemia is safe and effective in increasing hemoglobin level.

PATIENTS AND METHODS
In group A 7 patients (5RCMD and 2RA), with normal cytogenetics, M/F:4/3, median age 65 years (R64-75), Hb 10.7 g/dl (R10-11.5), saturation of iron binding capacity > 20%, with a median ferritin level of 480 ng/ml (R380-550), ESR 28 mm/1st hour (R20-32), CRP 6 mg/l (R4-7), normal B12 and folate, received liposomal iron 30 mg/day orally for 3 months.

In group B 7 patients (3RCMD and 4RA), with normal cytogenetics, M/F:5/2, median age 63 years (R62-70), Hb 11 g/dl (R10.8-12), saturation of iron binding capacity > 20%, with a median ferritin level of 430 ng/ml (R370-580), median ESR 30 mm/1st hour (R18-38), median CRP 7 mg/l (R5-7), normal B12 and folate, received support with iron sulfate 105 mg orally/day.

RESULTS
Group A showed a median hemoglobin increase of 1.5 g/dl (R0-2), a ferritin decrease to a median of 160 ng/ml (R 100-250), a ESR decrease to a median value of 15 mm/1st hour (R 8-20) and a median CRP 3 mg/l (R2-5).

In group B no significative increase of hemoglobin or decrease of ferritin, ESR and CRP were recorded. 2 patients showed hepygastralgia, 2 stipsis, 2 diarrohea.
CONCLUSION

Liposomal iron is safe, effective, well tolerated, effective in increase hemoglobin level and reduce inflammatory markers in low-risk MDS.