

00226 Infectious Complications in First Three Cycles of Azacitidine Did Not Negatively Impact Overall Survival of Myelodysplastic Syndrome Patients

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Aims: This study aims to evaluate the incidence and mortality of infectious complications (ICs) in patients with myelodysplastic syndrome (MDS) treated with azacitidine, predisposing risk factors for infections, the value of antimicrobial and antifungal prophylaxis, and clinical parameters affecting survival.

Methodology: Clinical characteristics assessed included severity of MDS using the IPSS - R score, number of cycles and response to azacitidine, number of days hospitalised, type of ICs, presence of comorbidities, absolute neutrophil count (ANC) at diagnosis, and overall survival (OS).

Result: A total of 307 cycles of azacitidine were administered to 49 patients (mean age 64.5 ± 12.3). All patients received antibacterial prophylaxis, and all but 5 received antifungal prophylaxis. The median number of cycles was 5 (range 1 - 42). Thirty - two patients had at least one IC. In patients who received at least 6 cycles of azacitidine, IC rates were not higher in the first three cycles of treatment compared to the next three cycles. ICs in the first three cycles of treatment were not associated with lower OS as compared to no ICs within the first three cycles ($p = 0.069$). IC rates were correlated with number of days hospitalised ($p < 0.001$), but not correlated with age, response to treatment, IPSS - R score, or ANC at diagnosis. Median OS from date of diagnosis was 12 months (range 1 - 113 months). OS was correlated with age ($p = 0.007$), IPSS - R score ($p = 0.01$), number of cycles ($p = 0.027$), and response to treatment ($p = 0.024$), but not ANC at diagnosis. Infections were predominantly bacterial, with 1 (2%) of our patients experiencing fungal infection.

Conclusion: The presence of infectious complications in the first three cycles of azacitidine therapy did not negatively impact overall survival. Age, response to treatment, IPSS - R score, and ANC at diagnosis did not predict for infectious complications. Antibacterial and antifungal prophylaxis may have beneficial effects.