Figure-1 Effect of various doses of IL-1α and IL-1β on cell death of erythroid progenitor cells from healthy subjects and β-thalassemia/Hb E patients.

Figure-2 Total cells of erythroid progenitor cell cultured with and without 20 ng/ml IL-1α and IL-1β from healthy subjects (A) and β-thalassemia/Hb E (B).

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Figure-3 Percentage of cell viability of erythroid progenitor cells treated with and without 20ng/ml IL-1α or IL-1β from healthy subjects and β-thalassemia/HbE patiens.

Figure-4 Percentage of cell erythroid annexin V positive cells represents apoptosis in cell treated with and without IL-1α or IL-1β from healthy subjects and β-thalassemia/HbE patients.

Table-1 Hematological data of Healthy subjects and β-thalassemia/HbE patients.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Healthy | | | | | | | | | | |
| Sample No. | Age/sex | WBC (x103/μl) | RBC  (x106/µl) | Hb  (g/dl) | Hct (%) | MCV  (fl) | RDW  (%) | Plt  (x103/μl) | Hb  Typing |  |
| 1 | 27/M | 10.6 | 5.4 | 16.2 | 44.6 | 82.3 | 13.9 | 317 | A2A |  |
| 2 | 24/M | 3.6 | 4.8 | 15.2 | 42.7 | 88.7 | 13.5 | 192 | A2A |  |
| 3 | 22/F | 9.1 | 4.2 | 13.2 | 37.5 | 88.8 | 13.3 | 336 | A2A |  |
| 4 | 23/F | 8.2 | 4.3 | 12.9 | 37.9 | 87.3 | 15 | 362 | A2A |  |
| 5 | 25/M | 5.4 | 5.6 | 17.3 | 48.3 | 86.2 | 13.8 | 277 | A2A |  |
| Mean |  | 7.3 | 4.8 | 14.9 | 42.2 | 86.6 | 13.9 | 296.8 |  |  |
| SD |  | 2.8 | 0.6 | 1.8 | 4.5 | 2.6 | 0.6 | 66.2 |  |  |
| β-thalassemia/HbE | | | | | | | | | | |
| Sample No. | Age/sex | WBC (x103/μl) | RBC  (x106/µl) | Hb  (g/dl) | Hct (%) | MCV  (fl) | Retics  (%) | RDW  (%) | Plt  (x103/µl) | HbE  (%) |
| 1 | 45/F | 29.8 | 3.1 | 7.8 | 23.3 | 74.5 | 7.7 | 23.3 | 461 | 51.0 |
| 2 | 20/F | 108.0 | 2.5 | 6.1 | 19.8 | 76.4 | 13.6 | 25.7 | 761 | 64.8 |
| 3 | 31/M | 46.8 | 3.0 | 5.7 | 18.4 | 61.5 | 18.1 | 25.8 | 786 | 68.9 |
| 4 | 30/M | 17.5 | 2.7 | 6.8 | 20.5 | 75.5 | 23.9 | 22.2 | 786 | 56.3 |
| 5 | 32/M | 24.7 | 2.9 | 6.9 | 22.6 | 76.8 | 19.2 | 33.1 | 614 | 65.0 |
| 6 | 31/F | 91.1 | 4.8 | 8.6 | 27.3 | 65.2 | 10.4 | 25.5 | 903 | 58.0 |
| Mean |  | 53.0 | 3.1 | 6.9 | 21.9 | 71.6 | 14.7 | 25.9 | 718.5 | 60.6 |
| SD |  | 37.7 | 0.8 | 1.0 | 3.1 | 6.5 | 6.4 | 3.8 | 156.3 | 6.6 |