Posttraumatic endophthalmitis is a rare but another extremely threatening complication for quality of vision, which has already been compromised by the trauma after perforating eye injuries. One of the substantial difficulties is the distinction between posttraumatic inflammation and development of a bacterial infection. In a hospital-based study 149 consecutive cases of perforating ocular trauma with open injuries to the eye within a 5-year period were retrospectively investigated. The study included assessment of the relationship between the severity of the injury and the risk of posttraumatic endophthalmitis using the ocular trauma score (OTS), the diagnosis, the therapeutic management and the prognosis concerning visual outcome 1 year after the posttraumatic endophthalmitis. In this study posttraumatic endophthalmitis was observed in 8 out of 149 cases (5.4%) after perforating ocular injuries. Severe injuries had a higher risk of this complication. In comparison to the clinical courses of non-posttraumatic endophthalmitis, the visual outcome showed a tendency to be worse after an average of 18 ± 6 months (1.25 vs 1.0 logMAR). In all of the cases the posttraumatic endophthalmitis could be successfully treated with antibiotics and surgery and the already severely limited visual function due to the injury could at least be maintained in most cases. Due to the low case numbers statistical evidence of a clear benefit of treatment by a rapidly initiated and
intensive individualized surgery following trauma and a pathogen-specific and operative therapy is not possible: nevertheless, such a comprehensive therapeutic approach to posttraumatic endophthalmitis is recommended.