Craniofacial anomalies are rare complex pathologies which need a craniofacial team composed of neurosurgeon, a craniofacial plastic surgeon, and an ophthalmologist. Anomalies at craniofacial region either due to developmental malformation of the brain (neural tube defects) or premature closure of cranial or skull base sutures resulting in skull deformities and problems in normal physiological neurological development. Each of pathologies needs special neurological surgery management, sometimes the management is multi-staged. Neurosurgical management varied from diagnosis, the surgical procedures and long-term follow up. Hence, we describe the pathology of craniofacial anomalies and its associated syndromes in addition to the proper investigation needed for diagnoses and predict possible short and long-term complication. Also, what craniofacial anomalies care giver should be focusing on regarding neurological issues such as intra-cranial pressure early detection and treatment if high and optic nerve problems. Also dural repair, dealing with brain parenchyma and its vasculature, and better cosmetic outcome according to craniofacial metrics.