In this atlas we summarize our many years’ experiences in pituitary operations. This atlas consists of two parts. The first part is the different approaches and related neurological anatomy for pituitary surgery. The related microanatomy and live operation pictures are listed, from the body position and skin incision to the neurological structures and vessels during the operation. The second part is the typical pituitary adenomas cases found at the Beijing union medical college hospital, including the image materials before and after the operation, some pictures during the operation and some block diagrams.