Urolithiasis is a problem that is generally increasing in Myanmar. About 5-10% of stone patients are complex and complicated in clinical condition. Complex stones are not simple to treat at all. Almost all of the complex stones are having potential complications before and after surgery. Only one step procedure for removal of the stones is not fit for them and usually not possible to achieve the aim. Management plans for those stone patients are very different for every different individual. There are two main important factors important to judge the complex stone management - the distribution of stones in urinary system and the effects of stones in kidneys including body responses. Individual renal function assessment, inflammatory state of affected kidney, risk of septicemia during and after surgery, timing of surgery and type of surgery are valuable tools for preoperative evaluation, if the aim is to get less surgical complications and good outcomes. Emergency urinary diversion procedure is sometime needed. Bacteria identification is compulsory. Superadded tuberculosis infection is the one thing always to be considered in tropical stone diseases. Association with metabolic syndrome and stones is always to keep in mind. Meticulous calculation for complex calculus takes best outcome.