



Complications & Risks of RSI

The risks of RSI can be great and numerous. Since cardiac or respiratory arrest are absolute contraindications to RSI, anyone who undergoes RSI is, by definition, breathing. This may not be very effective breathing – hence the reason we may be considering RSI – but it is breathing nonetheless. *If you take away that respiratory drive with medications and intubate the esophagus and fail to recognize it or are unable to maintain critical oxygenation, whether or not you are able to get them intubated, you are at risk of the “clean kill”.* Other potential complications of RSI include:

- Aspiration
- Hypoxemia
 - particularly dangerous for patients with acute neurological problems or underlying cardiovascular/cerebrovascular disease.
- Increased intracranial pressure
 - problematic in patients with critical ICP at the outset.
- Bradycardia
- Oropharyngeal and laryngeal trauma



Take Home Points

- Rapid Sequence Intubation (RSI) is defined as a series of steps, including the administration of a paralytic agent, to a critically ill or injured patient (who is presumed to have a full stomach) in order to facilitate rapid successful orotracheal intubation while minimizing complications
- Sedation-facilitated intubation is generally discouraged in emergency situations as the risk of complications is higher and the success rate is lower than with RSI
- Three obstacles to laryngeal view:
 1. Patient anatomy
 2. Muscle tone
 3. Operator technique
- Indications for RSI:
 1. Actual/impending respiratory failure
 2. Actual/impending inability to protect the airway
 3. Combative secondary to presumed head injury
 4. Hypoxemia despite supplemental oxygen
 5. Facilitate evaluation/treatment/transfer
- Absolute RSI contraindications:
 1. Respiratory arrest
 2. Cardiac arrest
- Relative RSI contraindications:
 1. Anticipated difficult intubation
 2. Anticipated difficult BVMV
 3. Crash airway
- RSI risks:
 1. Failure to intubate
 2. Aspiration
 3. Hypoxemia
 4. Increased ICP
 5. Bradycardia
 6. Trauma
 7. Esophageal intubation