- **Title:** Salvage for nonunion after operative treatment of trochanteric fractures
- **Subtitle:** Exploring tips of salvage for trochanteric nonunion
- **Speaker Name:** Dr. Tomohiro Matsumura, Professor of Disaster medicine, [Jichi Medical University]

- **Topic Overview:** Management of trochanteric nonunion remains technically challenging.

- **Importance:** When repair is undertaken rather than conversion arthroplasty, successful treatment revolves around accurate deformity correction, preservation of vascularity, and stable durable fixation.

- **Statistics/Trends:** A definitive surgical strategy for trochanteric nonunion has not yet been established. A flexible approach tailored to each individual case is required.

- **Current Challenges:**

1. The proximal bone fragment is smaller and provides a limited area for fixation.
2. The high tensile and compressive stresses across this region makes difficult to achieve successful bony union.
3. It is difficult to determine the optimal implant according to type of nonunion.

- **Proposed Solutions:** Adequate pre-operative planning is crucial. For internal fixation implants, we focus on the combination of augmentation plates and intramedullary nails. However, the most important thing is to regain good alignment and obtain bony support such as the Dimon method that can withstand early loading.

- **Breakthrough 1:** Revision surgery using the Dimon method results in good bone union and treatment outcomes.

- **Breakthrough 2:** Retrograde reaming from the nonunion site can recreate an optimal cephalomedullary nail entry point.

- **Impact:** These approaches have led to reliable union and recovery of function.

- **Future Prospects:** Development of biological agents that bring about good bone healing and development of implants with nail & plate combination.

- **Takeaway Messages:** In salvage surgery for trochanteric nonunion, it is necessary to regain good alignment and obtain bony support such as the Dimon method that can withstand early weight bearing.

- **Call to Action:** The best way to prevent nonunion is to achieve good alignment and bone union through initial surgery.