Enhanced Recovery after Surgery (ERAS)

- Evidenced Based Guidelines – detailed protocols
- Local team – implementation of guidelines
- Patient education and information
- Patient data base (EIAS), Research possibility!
- Compliance to 20 central items
- Follow-up meetings
Guidelines
Evidence level and recommendation grade

Colorectal surgery
Gynecology / Oncology surgery
Gastrointestinal
Gastrectomy
Cystectomy for bladder cancer
Pancreatoduodenectomy
Bariatric surgery
Liver surgery

Evidence level

High
Moderate
Low
Very low

SHORT TERM OUTCOME

Preoperative items
Intra / postoperative items
Patient education before surgery
Check list

After surgery
Check list
Mobilization, enteral feeding, blood samples etc

LOCAL TEAM
Surgeons, Anesthesiologists, ERAS coordinator + staff from units
Implement ERAS in local routines
REGISTER (EIAS)

Pre operative: Smoking, diseases, P-gossum score
Per operative: Surgery, anesthesia, analgesia, fluids.....
Post operative: Nutrition, mobilization, pain, opioids, length of stay....
Complications
30 day follow-up

Compliance to 20 items

Compliance to ERAS and outcomes

* p<0.05

Symptoms
30-day morbidity
Readmissions

Follow-up meetings to improve compliance
### What about sleep apnea in ERAS??

**Guidelines - Bariatric surgery**

<table>
<thead>
<tr>
<th>Treatment Description</th>
<th>Evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPAP treated, continue on CPAP</td>
<td>moderate</td>
<td>strong</td>
</tr>
<tr>
<td>Consider CPAP at BMI &gt;50 kg/m²</td>
<td>low</td>
<td>strong</td>
</tr>
<tr>
<td>Postop BiPAP/NIV in OHS</td>
<td>low</td>
<td>strong</td>
</tr>
<tr>
<td>CPAP rather than oxygen in OSA</td>
<td></td>
<td>strong</td>
</tr>
</tbody>
</table>

### Registration of sleep apnea

- Pre operative registration of sleep apnea
- Post operative usage of CPAP

**Sleep apnea treatment, one of 20 "compliance items"?**

Needs better evidence of effect

### RESEARCH

**Outcomes and baseline characteristics**

**ERAS database (EIAS)**

- Multicenter large studies
- OSA identification and RCT on CPAP treatment

**SASM and ERAS could connect USA and Europe**