**Table, Supplemental Digital Content 1.** Summary of treatment change with some overlapping

|  |  |
| --- | --- |
| **Treatment Change** | **N (%)** |
| Start PPI | 15 (25.9) |
| Increase PPI | 4 (6.9) |
| Switch PPI | 1 (1.7) |
| Start H2RA | 2 (3.4) |
| Start prokinetic | 11 (19.0) |
| Increase prokinetic | 1 (1.7) |
| Switch prokinetic | 3 (5.2) |
| Start neuromodulator | 1 (1.7) |
| Fundoplication referral | 2 (3.4) |
| Change of feeding mode | 3 (5.2) |
| Treatment unchanged | 15 (25.9) |
| *Anti-reflux treatment unchanged* | 6 (10.3) |
| *Anti-reflux treatment not commenced* | 9 (15.6) |

*PPI: proton pump inhibitors, H2RA: H2 Receptor Antagonist*

|  |  |
| --- | --- |
| **Abnormal ARI**  **N=6** | |
| Start PPI only | 4 |
| Start PPI + start prokinetic | 2 |

|  |  |
| --- | --- |
| **Abnormal RBM**  **N=2** | |
| Start AST only | 2 |

**Figure, Supplemental Digital Content 2.** Treatment changes in off AST group

|  |  |
| --- | --- |
| **Hypersensitive Esophagus**  **N=10** | |
| Start PPI only | 5 |
| Start PPI + start prokinetic | 2 |
| Anti-reflux treatment not commenced | 3 |

|  |  |
| --- | --- |
| **Normal: Functional/Non-reflux N=6** | |
| Anti-reflux treatment not commenced | 3 |

|  |  |
| --- | --- |
| **Abnormal ARI**  **N=4** | |
| Start prokinetic only | 1 |
| Switch prokinetic only | 1 |
| Start H2RA + start prokinetic + fundoplication referral | 1 |
| Switch PPI + switch prokinetic | 1 |

|  |  |
| --- | --- |
| **Hypersensitive Esophagus**  **N=11** | |
| Increase PPI only | 2 |
| Start prokinetic only | 3 |
| Start prokinetic + fundoplication referral | 1 |
| Start H2RA + start prokinetic | 1 |
| Increase prokinetic only | 1 |
| Change in feeding mode | 3 |
| Anti-reflux treatment unchanged | 3 |

|  |  |
| --- | --- |
| **Normal: Functional/Non-reflux N=6** | |
| Increase PPI only | 1 |
| Increase PPI + Switch prokinetic | 1 |
| Start neuromodulator | 1 |
| Anti-reflux treatment unchanged | 3 |

**Figure, Supplemental Digital Content 3.** Treatment changes in on AST group

|  |  |
| --- | --- |
| Abnormal ARI N=1 | |
| Switch AST + start prokinetic | 1 |

***Figure, Supplemental Digital Content 4****. Treatment changes in EA/TEF off AST group (N=10)*

|  |  |
| --- | --- |
| Hypersensitive Esophagus  N=6 | |
| Start prokinetic only | 3 |
| Start H2RA + start prokinetic | 1 |
| Change in feeding mode | 2 |
| Fundoplication referral | 1 |
| Anti-reflux treatment unchanged | 2 |

|  |  |
| --- | --- |
| Normal: Functional/Non-reflux N=3 | |
| Increase AST only | 1 |
| Increase AST + Switch prokinetic | 1 |
| Anti-reflux treatment unchanged | 1 |

**Table, Supplemental Digital Content 5.** Predictive factors and their relationship with score improvement

|  |  |
| --- | --- |
| **Predictive factors** | **P value** |
| Height z score | 0.658 |
| Weight z score | 0.686 |
| Gender (M vs F) | 0.385 |
| Age (Infant vs Older Children) | 0.669 |
| MII-pH results (Normal vs abnormal) | **0.027** |
| Symptom indication (TES vs EES) | 0.379 |
| Prior fundoplication (Yes vs No) | 0.742 |
| Comorbidities (Yes vs No) | 0.577 |
| Feeding mode (Oral vs non-oral) | 0.682 |
| Medication status (On AST vs off AST) | 0.385 |
| Medication change (Yes vs No) | **P<0.001** |

*MII-pH: multichannel intraluminal impedance and pH, AST: acid suppression therapy*