### Components of the GPAT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Component** | **Responses** | **Hot** | **Cold** | **Mandatory** | |
| **Global Competencies** |  |  |  | hot | cold |
| Tip control: | 1 - Very Poor - Uncontrolled, shaky, and undirected  5 - Very Good - Controlled, stable and purposeful |  |  | x | x |
| Fully appreciates / demonstrates extent of the polyp to be resected | 1 - Very Poor - Focusses on one area, does not demonstrate appreciation of the entire polyp  5 - Very Good - Clearly appreciates entire extent of polyp. Approach and resection reflect this. |  |  | x | x |
| Positioning with respect to the polyp | 1 - Very Poor - Not at 6 o’clock, far from the colonoscope, fluid covering lesion (poor use of gravity)  5 - Very Good - Lesion at or near 6 o’clock, close to the colonoscope, fluid lies away from lesion (good use of gravity) |  |  | x | x |
| Technique selected is appropriate for the polyp resected? | 1 - Very Poor - No clear need for en-bloc if selected, lesion unsuitable for cold snare, hot snare for polyp smaller than 10mm  5 - Very Good – Correct decision for en-bloc versus piecemeal, hot versus cold appropriate for the polyp |  |  | x | x |
|  |  |  |  |  |  |
| **Injection Technique** |  |  |  |  |  |
| Injection is performed in the correct plane | 1 - Very Poor - Injection infrequently results in sustained submucosal lifting (transmural / intramucosal injection)  5 - Very Good – The submucosal plane is quickly found and injection rapidly results in sustained mucosal lifting (needle in submucosa) |  |  | x |  |
| Injection is performed dynamically | 1 - Very Poor - once the needle is situated in the submucosa there is no movement of the needle away from the muscularis toward the centre of the lumen  5 - Very Good - once the needle is in the submucosa there is graduated movement of the needle away from the muscularis towards the centre of the lumen |  |  | x |  |
| Injection is used to improve lesion access | 1 - Very Poor - injection does not facilitate access to the target lesion  5 - Very Good - injection clearly facilitates access to the target lesion |  |  | x |  |
|  |  |  |  |  |  |
| **Snare Placement Technique** |  |  |  |  |  |
| Appropriate Snare Size/Type Selected | 1 - Very Poor - snare clearly too large / small and of incorrect type (thin wire vs thick wire) for the polyp  5 - Very Good - snare appropriate size and type for the polyp |  |  | x | x |
| Stable position with lesion at 6 'o clock OR transformed to 6 'o clock | 1 - Very Poor - snare position is not consistently maintained at 6 o’clock and/or the position is unstable  5 - Very Good - snare position is consistently maintained at 6 o’clock and the position is stable |  |  | x | x |
| Maximising snare capture | 1 - poor capture of tissue/scrapes the surface of the polyp/no use of downward pressure/no use of gas aspiration may result in incomplete mucosal layer excision  5 - good capture of polyp tissue within snare/use of downward pressure/use of gas aspiration resulting in compete capture of adequate target tissue |  |  | x | x |
| Snare precisely visualised during placement and closure (V of the snare) | 1 - Very Poor - snare V at intersection with snare catheter not visualised during closure and far from the colonoscope  5 - Very Good - snare V visualised consistently during closure and near to the colonoscope |  |  | x | x |
| Residual tissue islands avoided if piecemeal resection OR macroscopically complete if en-bloc resection attempted: | 1 - Very Poor - snare placement does not include normal margin (at edge) or does not use transected tissue edge (within lesion) as a guide resulting in tissue islands/incomplete en-bloc  5 - Very Good - snare placement includes > 2-3mm normal margin (at edge) of tissue or uses transected tissue edge as a guide (within defect) resulting in no tissue islands/complete en-bloc |  |  | x | x |
|  |  |  |  |  |  |
| **Safety Checks Prior to Resection (HOT snare only)** |  |  |  |  |  |
| Moves the closed snare to confirm independent movement from deeper structures: | 1 - Very Poor - does not check tissue mobility prior to transection with respect to deeper structures  5 - Very Good - checks mobility prior to transection with respect to deeper structures | x |  | x |  |
| Lifts the snare away from the muscularis propria prior to application of diathermy: | 1 - Very Poor - does not lift the snare prior to applying diathermy  5 - Very Good - lifts the snare away from the muscularis prior to the application of diathermy | x |  | x |  |
|  |  |  |  |  |  |
| **Defect Assessment After Resection** |  |  |  |  |  |
| MUCOSA - Looks for, detects and removes residual at margin and within defect | 1 – Very Poor – does not ostensibly and systematically check for residual adenomatous tissue at margin or within defect and/or does not remove successfully  5 - Very Good - ostensibly and systematically checks for residual adenomatous tissue within defect and at margin and removes it successfully |  |  | x | x |
| Thermal Ablation of the POST EMR Margin | 1 - Very Poor – unsteady application, results in areas of incomplete ablation, ablates visible polyp tissue, messy result  5- Very Good - steady, systematic application, does not ablate visible polyp tissue, complete ablation of the entire margin achieved | x |  | Not mandatory |  |
| SUBMUCOSA – Looks for, detects and treats any bleeding vessels within the defect | 1 - Very Poor - neither detects nor treats bleeding vessels in submucosa. treats benign submucosal appearances  5 - Very Good - detects and treats bleeding vessels in the submucosa. Does not treat other submucosal appearances including herniating vessels | x |  | x |  |
| MUSCULARIS – Looks for, detects and treats Deep Mural Injury => 2 (Sydney Classification) | 1 - Very Poor - misses signs of deep mural injury (types II-V) which require clip closure  5 - Very Good - detects and treats types II-V deep mural injury or confirms they are not present | x |  | x |  |
|  |  |  |  |  |  |
| **Accessory Techniques in Polypectomy** |  |  |  |  |  |
| Placement of Through the Scope Clips | 1 - Very Poor - poor tissue capture, poor use of suction and positioning to maximise correct orientation and amount of tissue captured  5 - Very Good - good use of suction, positioning and rotation to capture required tissue and achieves secure appearing closure | x |  |  |  |
| Use of Polyp Retrieval Device | 1 - Very Poor - poor positioning, does not capture all pieces, does not use sequential place and retrieve technique  5 - Very Good - 6 'o clock position, sequential place and retrieve technique applied, captures all pieces successfully | x |  |  |  |
| Use of Coagulation grasper | 1 - Very Poor – does not use water, does not wait for cessation of bleeding prior to application of diathermy, does not tent vessel away from the muscularis to apply diathermy  5 - Very Good - uses water to identify vessel, confirms correct placement with cessation of bleeding after closure, tents vessel away from the muscularis to apply diathermy | x |  |  |  |

Table 1

Table SMSA

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Size | Points | Morphology | Points | Site | Points | Access | Points | SMSA |  |  |
| < 1cm | 1 | Pedunculated | 1 | Left Colon | 1 | Easy | 1 |  | 1 | 4-5 points |
| 1 – 1.9cm | 3 | Sessile | 2 | Right Colon | 2 | Difficult | 3 |  | 2 | 6-9 points |
| 2 – 2.9cm | 5 | Flat | 3 |  |  |  |  |  | 3 | 9-12 points |
| 3 – 3.9cm | 7 |  |  |  |  |  |  |  | 4 | > 12 points |
| > 4cm | 9 |  |  |  |  |  |  |  |  |  |

Table SMSA +

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Size | Points | Difficult location \* | Points | Non-lifting/ previous attempt | Points | Granularity | Points | SMSA+ | ≥1 points |
| < 4cm | 0 | No | 0 | Lifting/no previous attempt | 0 | Granular | 0 |  | |
| ≥ 4cm | 1 | Yes | 1 | Non-lifting/previous attempt | 1 | Non-Granular | 1 |

\* Direct ileocecal valve involvement/diverticulum involvement/appendiceal orifice involvement