

# Chronic Hemorrhoids:

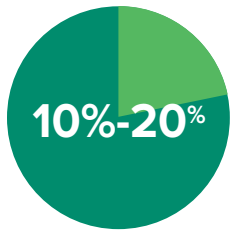
## Prevalence, risks and treatment options for providers

### PREVALENCE



Chronic hemorrhoidal disease affects **10,000,000 AMERICANS** per year<sup>1</sup>

It is responsible for **3.3 MILLION AMBULATORY CARE VISITS** within the U.S.<sup>1</sup>



While most cases can be treated conservatively, it is estimated that **10-20%** of the one million new cases of hemorrhoids each year **REQUIRE SURGERY**<sup>2</sup>

### RISK

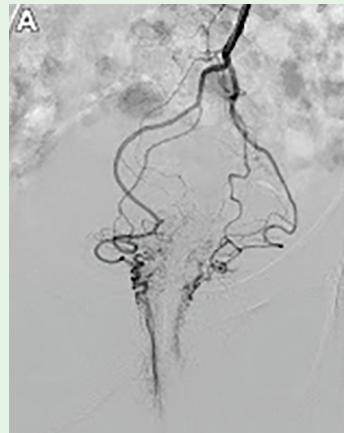
#### LEFT UNTREATED, CHRONIC HEMORRHOIDS CAN LEAD TO THE FOLLOWING:

- INFLAMMATION
- ANEMIA
- BLOOD CLOTS
- INFECTION
- SKIN TAGS
- PROLAPSED HEMORRHOIDS
- STRANGULATED HEMORRHOIDS

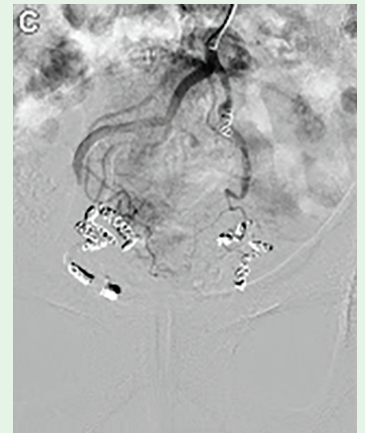
### TREATMENT AT NSVI

#### Hemorrhoidal Artery Embolization (HAE)

- HAE is a minimally invasive, image-guided therapy that **reduces hemorrhage** in patients with chronic hemorrhoids<sup>11</sup>
- Unlike hemorrhoidectomy or banding procedures, **HAE is performed via bloodstream access, not through the rectum.**
- It is **safe and effective**<sup>12</sup> and offers comparable results to surgery, but with **less pain**<sup>13</sup>
- There have been **no reported ischemia or serious complications** with HAE<sup>14,15,16</sup>
- Clinical **success** was achieved in **93%** of patients<sup>12</sup>
- **75% of patients were satisfied** with the procedure<sup>12</sup>
- Analysis of HDSS and SHS scores showed a significant improvement in **symptom reduction** and in **quality of life**<sup>17</sup>



PRE HAE



POST HAE



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VASCULAR & INTERVENTIONAL

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“ Hemorrhoidal embolization was a safe and effective technique in the treatment of symptomatic hemorrhoidal disease with minimal hospitalization, pain and disruption of daily activities.<sup>18</sup>

# Chronic Hemorrhoids:

## Treatment comparison for providers

| Treatment                                                                                                                      | Greater than 90% effective? | Minimally invasive? | Outpatient procedure? | Pain-free recovery? | Suitable for patients taking anticoagulation medication? | Suitable for immunocompromised patients? | Prevents hemorrhoids from returning? (<5% recurrence) |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------|-----------------------|---------------------|----------------------------------------------------------|------------------------------------------|-------------------------------------------------------|
| <b>Hemorrhoidectomy</b><br>A surgical procedure to remove the hemorrhoids.                                                     | ✓                           | ✗                   | ✗                     | ✗                   | ✗                                                        | ✗                                        | ✗                                                     |
| <b>Stapled hemorrhoidopexy</b><br>A surgical procedure to remove hemorrhoids using a stapling device.                          | ✗                           | ✗                   | ✗                     | ✗                   | ✓                                                        | ✓                                        | ✗                                                     |
| <b>Rubber band ligation</b><br>A less invasive procedure that places a band around the hemorrhoid to cut off its blood supply. | ✗                           | ✗                   | ✓                     | ✗                   | ✗                                                        | ✗                                        | ✗                                                     |
| <b>Sclerotherapy</b><br>A minimally invasive procedure that injects a chemical solution into the area around the hemorrhoid.   | ✗                           | ✓                   | ✓                     | ✓                   | ✓                                                        | ✓                                        | ✓                                                     |
| <b>Hemorrhoidal artery embolization</b><br>A minimally invasive procedure that cuts off the blood supply to the hemorrhoid.    | ✓                           | ✓                   | ✓                     | ✓                   | ✓                                                        | ✓                                        | ✓                                                     |

The physicians of North Star Vascular & Interventional have been performing embolization procedures and vascular therapies for many years and are among Minnesota's leading experts on these procedures. If you are interested in learning more about therapies for chronic hemorrhoids or other diseases and conditions, please consult with one of our radiologists by calling (952) 960-9399.

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