

**CAN DISCRETE VAGINAL FASCIAL DEFECTS BE ACCURATELY IDENTIFIED PRE-OPERATIVELY?****Hypothesis / aims of study**

To evaluate the pre-operative predictability of discrete defects in the endopelvic fascia and characterize commonly found defects.

**Study design, materials and methods**

This was a prospective, blinded case-series including 82 consecutive women undergoing vaginal reconstructive pelvic surgery from October of 2002 to January of 2004. Pre-operative examination included careful evaluation for the presence and location of discrete fascial defects by an experienced examiner (examiner #1). The presence and location of fascial defects were then recorded intra-operatively by a different experienced examiner (examiner #2) after the vaginal mucosa was dissected off the endopelvic fascia. Examiner #2 was blinded to the predicted defects noted in the pre-operative examination by examiner #1. The results of the pre-operative and intra-operative exam were then compared. Site-specific repairs were performed on all fascial defects.

**Results**

The average age of the women enrolled in the study was 63.7 (43-88) years.

The pre-operative predicted defects and intra-operative findings were as follows:

Defect Type	Predicted (%)	Intra-op (%)
PST	63 (76.8%)	59 (72.0%)
AST	14 (17.1%)	9 (11.0%)
NONE	11 (13.4%)	12 (14.6%)
AC	2 (2.4%)	0
PC	1 (1.2%)	3 (3.6%)
PSR	0	4 (4.9%)
PIT	0	1 (1.2%)

- PST = Posterior superior transverse separation from vaginal apex  
 AST = Anterior superior transverse separation from vaginal apex  
 NONE = No fascial defect identified  
 AC = Anterior central defect  
 PC = Posterior central defect  
 PSR = Posterior superior right-sided separation  
 PIT = Posterior inferior transverse separation from perineal body

The pre-operative exam accurately predicted specific intra-operative findings in 55 (67.1%) of the cases.

**Interpretation of results**

The most common defect predicted (76.8%) and encountered intra-operatively (72%) was a transverse separation of the posterior endopelvic fascia from the vaginal apex. The second most frequently predicted (17.1%) and intra-operatively encountered (11.0%) defect was an anterior transverse separation of the endopelvic fascia from the vaginal apex. The remainder of the defect types, including separations of the recto-vaginal septum from the perineal body (1.2%), were relatively uncommon. Fascial breaks of any sort were present in 85.4% of the patients.

**Concluding message**

Specific defects in the endopelvic fascia are extremely common in association with vaginal prolapse. These are usually separations of the endopelvic fascia from the apex, particularly in the posterior vagina. However, the ability to accurately determine the presence and location of a specific defect on pre-operative examination is limited.