American College of Radiology
ACR Appropriateness Criteria®
Radiologic Management of Iliofemoral Venous Thrombosis

Variant 1: **Acute iliofemoral DVT with mild symptoms less than 14 days, otherwise healthy.**

Procedure	Appropriateness Category
Anticoagulation alone	Usually Appropriate
CDT/PMT with or without stent placement	Usually Not Appropriate
Graded compression stocking therapy	May Be Appropriate
Surgical thrombectomy techniques	Usually Not Appropriate

Variant 2: **Acute iliofemoral DVT with moderate to severe symptoms present for less than 14 days, otherwise healthy.**

Procedure	Appropriateness Category
Anticoagulation alone	Usually Appropriate
CDT/PMT with or without stent placement	Usually Appropriate
Surgical thrombectomy techniques	May Be Appropriate

Variant 3: **Acute femoropopliteal DVT with mild to moderate symptoms present for less than 14 days, otherwise healthy.**

Procedure	Appropriateness Category
Anticoagulation alone	Usually Appropriate
CDT/PMT	Usually Not Appropriate
Graded compression stocking therapy	May Be Appropriate

Variant 4: **Acute iliofemoral DVT and symptoms less than 14 days. Cross-sectional imaging consistent with May-Thurner syndrome.**

Procedure	Appropriateness Category
Anticoagulation alone	May Be Appropriate
CDT/PMT with or without stent placement	Usually Appropriate
Hybrid surgical thrombectomy with stenting	May Be Appropriate

Variant 5: **Acute iliofemoral DVT and limb-threatening ischemia (phlegmasia cerulea dolens).**

Procedure	Appropriateness Category
Anticoagulation alone	Usually Not Appropriate
CDT/PMT with or without stent placement	Usually Appropriate
Surgical thrombectomy with or without stent placement	Usually Appropriate
Systemic thrombolysis	May Be Appropriate

Variant 6: **Iliofemoral DVT with persistent moderate symptoms at least 3 months after initial treatment with anticoagulation alone.**

Procedure	Appropriateness Category
Anticoagulation alone	May Be Appropriate
CDT/PMT with or without stent placement	May Be Appropriate
Graded compression stocking therapy	May Be Appropriate
Surgical thrombectomy with or without stent placement	May Be Appropriate (Disagreement)

Variant 7: **Acute iliofemoral DVT in a pregnant patient with moderate to severe symptoms.**

Procedure	Appropriateness Category
Anticoagulation alone	Usually Appropriate
CDT/PMT with or without stent placement	May Be Appropriate
Graded compression stocking therapy	May Be Appropriate
Surgical thrombectomy with or without stent placement	May Be Appropriate

RADIOLOGIC MANAGEMENT OF ILIOFEMORAL VENOUS THROMBOSIS

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Summary of Literature Review

Introduction/Background

Venous thromboembolic disease (VTE), including deep vein thrombosis (DVT) and pulmonary embolism (PE), carries significant morbidity and economic burden with an estimated annual $7 to 10 billion in health expenditures and 375,000 to 425,000 incidence of new cases per year in the United States alone [1]. In addition to the risks of fatal PE, VTE is associated with high rates of recurrent DVT, post-thrombotic syndrome (PTS), and chronic PE with significant impacts on patient quality of life [1]. Management of VTE is multidisciplinary with potential involvement of providers from specialties and subspecialties including internal medicine, family practice, hematology/oncology, pulmonology, cardiology, vascular surgery, and interventional radiology. Iliofemoral venous thrombosis carries high risk for PE, recurrent DVT, and PTS [2] with reported estimates of PTS ranging from 30% to 71% of those with iliofemoral DVT [2,3]. Goals for management include preventing morbidity from venous occlusive disease as well as preventing morbidity and mortality from PE.

Overview of Diagnostic and Therapeutic Options

In general, the standard of care for iliofemoral VTE is anticoagulation in patients without a contraindication [4]. Depending on the circumstance, cross-sectional imaging may be appropriate to assess for an underlying obstructive cause, such as a venous compression syndrome or mass. In addition, ultrasound or CT may be helpful to differentiate chronic from acute DVT [2]. Patients with an underlying anatomic compression syndrome (eg, May-Thurner syndrome) amenable to intervention or surgery generally have this addressed in addition to receiving anticoagulation therapy. There may be differences in the anticoagulation regimens prescribed for patients, depending on the clinical scenario (eg, cancer-related VTE, pregnancy-related VTE, or VTE in the setting of renal impairment). Although in some instances, there may be a role for more aggressive therapy with catheter-based interventions or surgery in addition to anticoagulation, anticoagulation alone remains the pillar of care.

Discussion of Procedures by Variant

Variant 1: Acute iliofemoral DVT with mild symptoms less than 14 days, otherwise healthy.

Anticoagulation Alone

The first-line therapy for acute iliofemoral DVT with mild symptoms is anticoagulation [5]. Therapy is indicated, even in the absence of symptoms, to prevent recurrent VTE. Duration of anticoagulation is generally at least 3 months, with indefinite anticoagulation indicated for those with unprovoked DVT and otherwise without contraindication, such as a significant bleeding risk with anticoagulation [5]. Those with a contraindication to anticoagulation may be considered for inferior vena cava filter placement [6,7].

CDT/PMT With or Without Stent Placement

Two large prospective randomized controlled trials, The Norwegian-based Catheter-directed Venous Thrombolysis (CaVenT) trial and the United States–based Acute Venous Thrombosis: Thrombus Removal With Adjunctive Catheter-Directed Thrombolysis (ATTRACT) trial attempted to address whether improved early venous patency results in reduced PTS with rigorous trial designs comparing catheter-based therapies with thrombolysis and anticoagulation to standard-of-care anticoagulation alone. Five-year outcomes from the CaVenT trial demonstrated

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improved venous disease grading scores with reduction in PTS in those treated with catheter-directed thrombolysis (CDT) compared with anticoagulation alone (43% versus 71%, *P* <.0001) [3]. Despite this, the two arms did not differ in patient quality-of-life measures. The larger ATTRACT trial showed no overall difference in PTS outcomes between patients randomized to CDT versus anticoagulation alone (47% versus 48%, *P* =.56) despite significant decreases in PTS severity scores as measured by the Villalta scale and Venous Clinical Severity Score (VCSS) [8]. The incidence of major bleeding was greater in those treated with CDT (1.7% versus 0.03%, *P* =.049). Thus, based on these recent prospective randomized trials, there is currently no role for catheter-based therapies in this cohort with mild symptoms to reduce PTS [3,8].

Graded Compression Stocking Therapy

Graded compression therapy with stockings has traditionally been recommended to address venous stasis changes and potentially prevent PTS; however, several recent randomized trials have found no specific benefit to compression therapy in preventing PTS [9-14]. Use of graded compression stockings in conjunction with additional measures, such as frequent leg elevation, may be recommended in addition to anticoagulation on an individualized basis for patient comfort and symptom management.

Surgical Thrombectomy Techniques

The Society of Vascular Surgery guidelines generally recommend catheter-based therapies over open surgery for VTE and, as such, surgical thrombectomy would not be recommended for mildly symptomatic or asymptomatic iliofemoral DVT considering the risk-to-benefit ratio [15].

Variant 2: Acute iliofemoral DVT with moderate to severe symptoms present for less than 14 days, otherwise healthy.

Acute proximal DVT, defined as involvement of the iliac and upper femoral venous system, carries a high risk of PE [2,5]. Morbidity associated with proximal iliofemoral DVT includes recurrent DVT or PE and PTS, which consists of lower-extremity pain, swelling, venous claudication, and venous stasis, potentially leading to venous ulceration. For these reasons, treatment for acute proximal iliofemoral DVT is indicated [5].

Anticoagulation Alone

Anticoagulation with heparin, vitamin K antagonist, or direct oral anticoagulants are recommended as a first-line therapy, with newer guidelines suggesting preference for the direct oral anticoagulants in patients without cancer because of a reduced bleeding risk and better patient convenience [5]. Duration of anticoagulation generally lasts for at least 3 months, with indications for indefinite anticoagulation remaining for those with unprovoked DVT and otherwise without contraindication to or significant bleeding risk with anticoagulation [5].

CDT/PMT With or Without Stent Placement

There has been considerable interest in more aggressive measures to quickly remove thrombus burden in acute iliofemoral DVT to minimize valvular damage that can lead to PTS, termed the “open vein” hypothesis. Studies have consistently demonstrated improved early venous patency rates in patients undergoing CDT or pharmacomechanical thrombectomy (PMT) with angioplasty or stenting of obstructive lesions relative to anticoagulation alone [16]. Two large prospective randomized controlled trials, the CaVenT trial and the ATTRACT trial, attempted to address whether improved early venous patency resulted in reduced PTS with rigorous trial designs comparing catheter-based therapies with thrombolysis and anticoagulation to standard-of-care anticoagulation alone. Five-year outcomes from the CaVenT trial demonstrated improved venous disease grading scores with reduction in PTS in those treated with CDT compared with anticoagulation alone (43% versus 71%, *P* <.0001) [3]. Despite this, the two arms did not differ in patient quality-of-life measures. The larger ATTRACT trial showed no overall difference in PTS outcomes between patients randomized to CDT versus anticoagulation alone (47% versus 48%, *P* =.56) despite significant decreases in PTS severity scores as measured by the Villalta scale and VCSS [8]. The incidence of major bleeding was greater in those treated with CDT (1.7% versus 0.03%, *P* =.049), with no reported fatal intracranial hemorrhage. A subgroup analysis of 391 prospectively stratified patients within the ATTRACT trial who had acute DVT involving iliac and/or common femoral veins (ie, the subgroup with more proximal DVT involving larger central veins) found a benefit to additional CDT in this cohort relative to anticoagulation alone, particularly in those <65 years of age [17]. The benefits included significant improved early reduction in leg pain and swelling (*P* <.01), reduced PTS severity through 24 months (*P* <.01), and a decreased proportion of patients with moderate or severe PTS (Villalta scale >10 or ulcer: 18% versus 28%; relative risk [RR] 0.65, *P* =.021; Villalta scale >15 or ulcer: 8.7% versus 15%; RR 0.57, *P* =.048; VCSS >8: 6.6% versus 14%; RR 0.46, *P* =.013) despite no differences in the overall incidence of PTS at 2 years. Furthermore, significant

improvement in venous-specific quality-of-life scores were noted in the cohort receiving CDT compared with anticoagulation alone (P =.029), despite no difference in generic quality of life (P >.20). Moreover, in this subgroup, additional CDT did not result in increased major bleeding relative to anticoagulation alone (1.5% versus 0.5%, P =.32). Part of the challenge in interpreting the apparent discrepancy between lack of measurable change in generic quality-of-life assessments, despite decreases in severity or incidence of PTS according to venous grading scales in these two studies, may rest in the relatively broad range of quality-of -life perception that has been reported for VTE [18].

Percutaneous mechanical thrombectomy alone has also been reported in a small series for reduction of thrombus burden and symptomatic improvement [19]. For patients who cannot receive thrombolytics and who have severe symptoms, thrombectomy strategies in addition to anticoagulation may be reasonable, although there is no relevant literature regarding the durability of these treatments and their long-term outcomes. Thus, optimal patient selection for more aggressive strategies versus anticoagulation alone may need further refinement to identify those who will benefit most. At present, the best available data suggest CDT in conjunction with anticoagulation should be reserved for select cases of proximal DVT in severely symptomatic patients with low bleeding risk [3,8,17].

Surgical Thrombectomy Techniques

Although the Society of Vascular Surgery guidelines recommend catheter-based therapies over open surgery for VTE [15], surgical thrombectomy with or without arteriovenous fistula creation and hybrid operative thrombectomy with iliac vein stenting has been explored as an alternative intervention for acute DVT. Hybrid techniques with thrombectomy and stenting have largely replaced adjunctive arteriovenous fistula creation. Available studies include case series, case control trials, and a few prospective trials showing improved patient outcomes with operative techniques but no large rigorous head-to-head controlled trials assessing the performance of operative strategy to catheter-based therapies or anticoagulation alone [20-23]. For patients who cannot receive thrombolytics and who have severe symptoms, thrombectomy strategies may be reasonable, although there is no relevant literature regarding the durability of these treatments and their long-term outcomes.

Variant 3: Acute femoropopliteal DVT with mild to moderate symptoms present for less than 14 days, otherwise healthy.

Anticoagulation Alone

Femoropopliteal DVT carries a risk for proximal extension and PE and is therefore also treated with anticoagulation as a first-line therapy. Duration of anticoagulation is generally at least 3 months, with indications for indefinite anticoagulation remaining for those with unprovoked DVT and otherwise without contraindication to or significant bleeding risk with anticoagulation [5].

CDT/PMT

Despite the known risks of PTS in this cohort, the best prospective evidence to date with the ATTRACT trial has demonstrated no improvement in PTS at 2 years with more aggressive CDT over anticoagulation alone. There is no relevant literature regarding use of percutaneous mechanical thrombectomy or surgical thrombectomy for those who cannot receive anticoagulation in this setting; however, extrapolation from the ATTRACT trial suggests this would not be of clinical benefit [8,15].

Graded Compression Stocking Therapy

Graded compression therapy with stockings has traditionally been recommended to address venous stasis changes and potentially prevent PTS; however, several recent randomized trials have found no specific benefit to compression therapy in preventing PTS [9-14]. Use of graded compression stockings in conjunction with additional measures, such as leg elevation, may be recommended in addition to anticoagulation on an individualized basis for patient comfort and symptom management.

Variant 4: Acute iliofemoral DVT and symptoms less than 14 days. Cross-sectional imaging consistent with May-Thurner syndrome.

Anticoagulation Alone

Anticoagulation is generally a first-line therapy for acute iliofemoral DVT [5]. Presentation of acute left-sided DVT, particularly in otherwise young and healthy patients, should raise suspicion for a compression syndrome as there is a relatively higher incidence of iliac vein compression in this cohort (ie, May-Thurner Syndrome). As this finding may be underdiagnosed, many patients with iliofemoral DVT and an obstructive iliac vein lesion may be treated with anticoagulation alone. Recurrent VTE in the affected limb has been observed more frequently with anticoagulation alone compared with those who underwent additional treatment with thrombectomy and iliac vein

stenting [24-26]. Despite a general consensus to treat iliac vein obstructive lesions with stents in addition to anticoagulation, there is no relevant literature rigorously testing this practice against anticoagulation alone in prospective randomized controlled trials.

CDT/PMT With or Without Stent Placement

Presentation of acute left-sided DVT, particularly in otherwise young and healthy patients, should raise suspicion for a compression syndrome as there is a relatively higher incidence of iliac vein compression in this cohort (ie, May-Thurner Syndrome). Because of the underlying anatomic compression, additional measures, including balloon angioplasty with stenting of the compressive lesion, has been described with reported benefit in a small retrospective series [27-29]. Although there is no relevant literature rigorously testing this practice against anticoagulation alone in prospective randomized controlled trials, the general consensus is to treat iliac vein obstructive lesions with stents in addition to anticoagulation as recurrent VTE in the affected limb has been observed more frequently with anticoagulation alone [24-26].

Hybrid Surgical Thrombectomy With Stenting

Surgical thrombectomy/endovenectomy and iliac vein stenting have also been described in the setting of obstructive iliofemoral DVT with reported benefit in small retrospective series [23,30]; however, there is no relevant literature comparing this therapy against anticoagulation alone or anticoagulation with catheter-based therapy in prospective randomized controlled trials.

Variant 5: Acute iliofemoral DVT and limb-threatening ischemia (phlegmasia cerulea dolens).

Anticoagulation Alone

Rarely, acute iliofemoral DVT can present as a potentially life- and limb-threatening emergency known as phlegmasia cerulea dolens. Typically, a faster course of action is required above anticoagulation alone to prevent venous gangrene and potentially death.

CDT/PMT With or Without Stent Placement

Depending on the state of the threatened limb, techniques for rapid thrombus resolution have included surgical thrombectomy, percutaneous mechanical thrombectomy, and CDT [15,21,31,32]. Because of the rare nature of the condition, there is no relevant literature comparing outcomes between medical, catheter-based, or surgical therapies with prospective randomized controlled trials.

Surgical Thrombectomy With or Without Stent Placement

Depending on the state of the threatened limb, techniques for rapid thrombus resolution have included surgical thrombectomy, percutaneous mechanical thrombectomy, and CDT [15,21,31,32]. Because of the rare nature of the condition, there is no relevant literature comparing outcomes between medical, catheter-based, or surgical therapies with prospective randomized controlled trials.

Systemic Thrombolysis

Systemic intravenous delivery of thrombolytic medication has been performed in the past for severe symptoms of DVT [16]. Because of the risks of potential bleeding complications, systemic thrombolysis has largely been supplanted with catheter and surgical options that provide rapid treatment with lower risks of bleeding. However, because of the rare nature of the condition, there is no relevant literature directly comparing outcomes between medical, catheter-based, or surgical therapies with prospective randomized controlled trials.

Variant 6: Iliofemoral DVT with persistent moderate symptoms at least 3 months after initial treatment with anticoagulation alone.

Anticoagulation Alone

The best way to address chronic DVT to improve symptoms of PTS remains controversial. Anticoagulation is indicated if imaging demonstrates recurrent VTE or for patients with unprovoked DVT to prevent recurrent VTE [5]. In the absence of new DVT, symptoms may reflect chronic PTS. Interventional catheter-based techniques and surgery have been described to address chronic symptoms. There is no relevant literature assessing the performance of these different procedures in prospective randomized controlled trials.

CDT/PMT With or Without Stent Placement

Beneficial outcomes have been reported with chronic DVT symptoms in small retrospective uncontrolled series with venous recanalization and improvement of outflow with balloon angioplasty and stenting [33-36]. A post hoc subgroup analysis of patients randomized to CDT alone versus CDT with adjunctive balloon angioplasty showed beneficial outcomes with additional balloon angioplasty on symptomatic venous scales with patients presenting

with subacute, rather than acute, DVT [37]. A trial examining the efficacy of endovascular intervention for chronic DVT with stenting of occluded segments with or without adjunctive endovenous ablation for saphenous vein reflux (Chronic Venous Thrombosis: Relief With Adjunctive Catheter-Directed Therapy, NCT03250247: https://clinicaltrials.gov/ct2/show/NCT03250247) is currently underway.

Graded Compression Stocking Therapy

Graded compression therapy with stockings is commonly employed to manage venous stasis symptoms, although recent series have shown it has no proven benefit in preventing PTS [9-14]. Use of graded compression stockings in conjunction with additional measures, such as leg elevation, may be recommended on an individualized basis for patient comfort and symptom management.

Surgical Thrombectomy With or Without Stent Placement

There is no relevant literature examining the efficacy of surgical thrombectomy compared with control groups in prospective randomized trials. Observational case series demonstrating symptomatic improvement after surgical endovenectomy with iliac vein stenting [38,39], and with saphenofemoral venous bypass [40], have been described.

Variant 7: Acute iliofemoral DVT in a pregnant patient with moderate to severe symptoms.

Anticoagulation Alone

VTE can complicate pregnancy, and first-line therapy is anticoagulation with low molecular weight heparin because of the lack of placental transgression [5]. There is no relevant literature providing guidance for duration of anticoagulation therapy, and individual patient management will factor risks of recurrent VTE and plans for future pregnancy. Although more aggressive thrombus removal strategies have been employed for pregnancy-related DVT, at present there is no relevant literature suggesting improvement in outcomes with use of these more aggressive therapies over anticoagulation alone in prospective randomized controlled trials. The available data suggest optimal management to be anticoagulation with low molecular weight heparin for iliofemoral DVT with mild to moderate symptoms and, potentially, catheter-based therapy in the second or third trimester for severe symptoms unrelenting after a trial of anticoagulation [41-43]. Surgical thrombectomy and arteriovenous fistula creation may be considered in the second or third trimester as well for severe refractory cases and to avoid radiation [21,44]. Depending on circumstances, optimal management could include anticoagulation until term, followed by CDT or thrombectomy if indicated for severe symptomatic DVT in the postpartum period [21,42,43].

CDT/PMT With or Without Stent Placement

There is no relevant literature defining the benefit of catheter-based therapies for pregnancy-related iliofemoral DVT compared with anticoagulation alone in prospective randomized controlled trials. Case series of patients presenting with severe symptoms treated with CDT including thrombolysis, percutaneous mechanical thrombectomy, angioplasty, and stenting have shown symptomatic efficacy and safety with respect to fetal and maternal health [42,44]. The issue of radiation exposure becomes critical, particularly in the first trimester, as reported radiation doses to the fetus have been estimated at 175 to 245 mGy, approximately 6- to 10-fold greater than environmental exposure [42]. Thus, local multidisciplinary ethics board discussion surrounding CDT in the first trimester is paramount. Second trimester CDT may be considered with severe symptoms refractory to anticoagulation, using shielding and principles of ALARA [42]. Depending on circumstances, optimal management could include anticoagulation until term, followed by CDT or thrombectomy if indicated for severe symptomatic DVT in the postpartum period [21,42,43].

Graded Compression Stocking Therapy

Graded compression therapy with stockings has traditionally been recommended to address venous stasis changes and potentially prevent PTS; however, several recent randomized trials have found no specific benefit to compression therapy in preventing PTS [9-14]. Use of graded compression stockings in conjunction with additional measures, such as leg elevation, may be recommended in addition to anticoagulation on an individualized basis for patient comfort and symptom management.

Surgical Thrombectomy With or Without Stent Placement

There is no relevant literature defining the benefit of surgical therapies for pregnancy-related iliofemoral DVT compared with anticoagulation or catheter-based therapies in prospective randomized controlled trials. Observational reports have described surgical thrombectomy with or without temporary arteriovenous fistula creation for management of DVT in pregnancy [21,44], with one study reporting 5 of 97 cases resulting in fetal demise, a 16.5% early thrombosis rate, and a secondary patency rate of 89.5% [45]. Surgical thrombectomy and arteriovenous fistula creation may be considered in the second or third trimester as well to avoid radiation [21,44].

Depending on circumstances, optimal management could include anticoagulation until term followed by thrombectomy if indicated for severe symptomatic DVT in the postpartum period [21,43].

Summary of Recommendations

- **Variant 1:** Anticoagulation alone is usually appropriate for a patient with acute iliofemoral DVT with mild symptoms <14 days, otherwise healthy.
- **Variant 2:** Anticoagulation alone or in conjunction with CDT/PMT with or without stent placement is usually appropriate for a patient with acute iliofemoral DVT with moderate to severe symptoms present for <14 days, otherwise healthy. These procedures may be complementary (ie, both may be performed to effectively manage the patient's care), particularly in patients <65 years of age.
- **Variant 3:** Anticoagulation alone is usually appropriate for a patient with acute femoropopliteal DVT with mild to moderate symptoms present for <14 days, otherwise healthy.
- **Variant 4:** Additional CDT/PMT with or without stent placement in conjunction with anticoagulation is usually appropriate for a patient with acute iliofemoral DVT and symptoms <14 days when cross-sectional imaging of the patient is consistent with May-Thurner syndrome.
- **Variant 5:** CDT/PMT with or without stent placement or surgical thrombectomy with or without stent placement is usually appropriate for a patient with acute iliofemoral DVT and limb-threatening ischemia (phlegmasia cerulea dolens). These interventions are equivalent alternatives (ie, only one procedure will be ordered to provide the clinical information to effectively manage the patient's care).
- **Variant 6:** Anticoagulation alone, CDT/PMT with or without stent placement, or graded compression stocking therapy may be appropriate for a patient with iliofemoral DVT with persistent moderate symptoms at least 3 months after initial treatment with anticoagulation alone. The panel did not agree on recommending surgical thrombectomy with or without stent placement for this particular clinical scenario. There is insufficient medical literature to conclude whether or not these patients would benefit from this intervention. Intervention in this patient population is controversial but may be appropriate.
- **Variant 7:** Anticoagulation alone is usually appropriate for a patient with acute iliofemoral DVT in a pregnant patient with moderate to severe symptoms.

Supporting Documents

The evidence table, literature search, and appendix for this topic are available at https://acsearch.acr.org/list. The appendix includes the strength of evidence assessment and rating round tabulations for each recommendation.

For additional information on the Appropriateness Criteria methodology and other supporting documents go to www.acr.org/ac.

Safety Considerations in Pregnant Patients

Imaging of the pregnant patient can be challenging, particularly with respect to minimizing radiation exposure and risk. For further information and guidance, see the following ACR documents:

- ACR–SPR Practice Parameter for the Safe and Optimal Performance of Fetal Magnetic Resonance Imaging (MRI) [46]
- ACR-SPR Practice Parameter for Imaging Pregnant or Potentially Pregnant Adolescents and Women with Ionizing Radiation [47]
- ACR-ACOG-AIUM-SMFM-SRU Practice Parameter for the Performance of Standard Diagnostic Obstetrical Ultrasound [48]
- ACR Manual on Contrast Media [49]
- ACR Guidance Document on MR Safe Practices: 2013 [50]

Appropriateness Category Names and Definitions

Appropriateness Category Name	Appropriateness Rating	Appropriateness Category Definition
Usually Appropriate	7, 8, or 9	The imaging procedure or treatment is indicated in the specified clinical scenarios at a favorable risk-benefit ratio for patients.
May Be Appropriate	4, 5, or 6	The imaging procedure or treatment may be indicated in the specified clinical scenarios as an alternative to imaging procedures or treatments with a more favorable risk-benefit ratio, or the risk-benefit ratio for patients is equivocal.
May Be Appropriate (Disagreement)	5	The individual ratings are too dispersed from the panel median. The different label provides transparency regarding the panel's recommendation. "May be appropriate" is the rating category and a rating of 5 is assigned.
Usually Not Appropriate	1, 2, or 3	The imaging procedure or treatment is unlikely to be indicated in the specified clinical scenarios, or the risk-benefit ratio for patients is likely to be unfavorable.

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