

Potential Complications of Sports Activities (Full Version with Comments)

Please note that this list is not at all exhaustive. It is strongly recommended that you consult with your doctor about potential complications for your sports of choice in your specific health condition.

Sports	Complications	Comments
Ball Sports Soccer, Volleyball, Tennis, etc.	Bleeding from esophageal varices Rupture of liver and spleen in patients with advanced liver disease Fractures (esp. in team sports) Pneumothorax (Tennis)	
Contact Sports Judo, Karate, etc.	Bleeding from esophageal varices Rupture of liver and spleen in patients with advanced liver disease Fractures (esp. in team sports, esp. with low bone density)	
Water Sports Swimming, Scuba Diving, etc.	Pseudomonas (in pools, etc.) Pneumothorax (diving)	
Extreme Sports Bungee Jumping, Parachuting, Free Climbing, etc.	Pneumothorax esp. in patients with advanced lung disease Bleeding from esophageal varices Rupture of liver and spleen in patients with advanced liver disease Fractures esp. with low bone density Exercise-induced hypoxemia (climbing at high altitude) Acute right heart failure (climbing at high altitude)	Bungee jumping not recommended
Winter Sports	Exercise-induced hypoxemia Acute right heart failure Pulmonary exacerbation	not recommended for patients with a decrease of oxygen saturation below 90% during exercise test

		<p><i>Recommendation:</i> annual ergometry, measurement of the oxygen saturation. In case oxygen saturation declines below 90% during exercise:</p> <ul style="list-style-type: none"> giving the patient a fixed heart rate borderline at this 90% oxygen line: during exercise heart rate should not go over the fixed point (controlled by heart rate monitor). oxygen supplementation during exercise (in general: all patients with an oxygen saturation below 90% at rest should do a training only with supplementation of oxygen) <p>Pulmonary exacerbation:</p> <ul style="list-style-type: none"> in general, sports may prevent a deterioration of lung function; however, worsening of pulmonary function has been described no general advice for or against winter sports can be given at the moment <p><i>Recommendation:</i> sufficient fluid intake is important</p>
Horse riding	ABPA: potential increased risk Pseudomonas: danger of acquiring it from the horse	
Strength Training with high loads	Pneumothorax Haemoptysis	<i>Pneumothorax prevention:</i> correct breathing technique during strength training Risk can probably be reduced through oxygen supplementation during exercise in patients with exercise-induced hypoxaemia
Sprinting	Haemoptysis	
Endurance Training	Hypoglycaemia in diabetes: possibility of decrease of blood glucose level during or after exercise when there is a treatment with insulin or other drugs decreasing the blood glucose level Dehydration and hyponatraemia	sporadic reports of hypoglycaemia following exercise in non-diabetic patients as well <i>recommendations:</i> <ul style="list-style-type: none"> carbohydrate intake before exercise, adjustment of the insulin dose all patients undertaking endurance sports should be well hydrated and take additional salt tablets (or drinks with high salt content)
Sauna / Hot Tubs	Pseudomonas	Not recommended