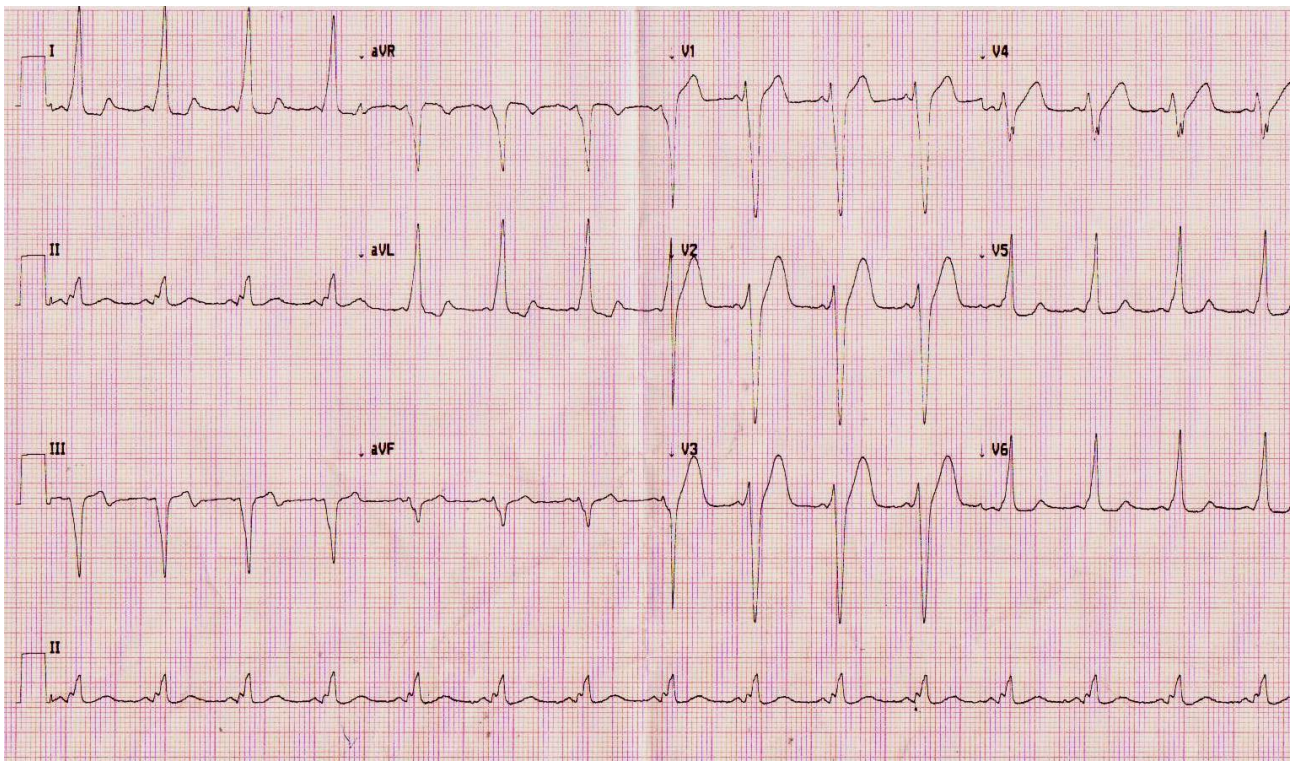
Masculino de 40 años portador de WPW asintomático - 2009

Dr. Ricardo Pizarro

Saludos a Todos:
Este ECG me lo envió hoy un colega; dice que es un paciente masculino de 40 años, que acudió a su ER por cefalea y dolor corporal (gripe), y el paciente le comentó que padecía del Síndrome de WPW, pero que nunca había presentado ninguna molestia, y que nunca se había atendido en un ER, que su hallazgo fué casual por un requisito preoperatorio reciente, y que estaba próximo a una ablación, por lo que decidió tomar el ECG que les presento a su consideración. No tengo más datos.

Hasta pronto,

Ricardo Pizarro



OPINIONES DE COLEGAS

Minha opinião:
WPW parede livre anterior direita do VD, ponto 2 de Gallangher, WPW Tipo B de Rosenbaum, ou I da classificação Européia e Região 5 de Lindsay. Poderia simular BCRE e área eletricamente inativa em parede inferior
Observação: O primeiro batimento em V1 possui maior grau de pré-excitação com delta negativa apenas no primeiro complexo. Esta certa intermitência parcial espontânea daria um caráter de benignidade. Sendo assintomático devemos tentar estratificar o risco em

forma não invasiva mediante **anamnese**, **Holter, teste ergométrico e o ecocardiograma**:

A) Anamnese:
a) história clínica minuciosa procurando fazer lembrar ao paciente de eventos que tenham ocorrido ao longo da vida. Mesmo atualmente assintomáticos a referência de sintomatologia no passado para fim de estratificação do risco devem ser considerados sintomáticos.
b) determinar o tipo de atividade do paciente no sentido de saber se o mesmo tem profissão ou atividade esportiva de risco individual ou coletivo: corredor de carro ou moto, motorista de ônibus, piloto de avião ou helicóptero, pára-quedista, trabalhadores de andaimes, etc.
c) se é portador de patologia que propicie maior facilidade para o aparecimento: estenose mitral, hipertireoidismo, hipertrofia miocárdica importante, cardiomiopatia hipertrófica, etc.

B) Eletrocardiografía dinâmica (Holter/24h)
O método permite:
a) Flagra eventuais eventos taquiarrítmicos.
b) Registrar intermitência da pré-excitação o que outorga um caráter de maior benignidade por ser um indicativo de via acessória com período refratário longo.
c) Registrar taquicardia por macrorreentrada ou taquicardias atriais pré-excitadas que podem indicar maior risco de morte súbita.

C) Teste ergométrico:
O exercício eventualmente - via estímulo adrenérgico – pode facilitar a condução pela via normal diminuindo ou abolindo a condução pela via em paralelo. Assim, perante o esforço podemos encontrar:
1) diminuição do grau de pré-excitação: presente em 50% dos casos. Esta resposta afasta possibilidade de via anômala com período refratário anterógrado curto.
2) abolição súbita da pré-excitação: presente em 18% dos casos. Indica via acessória com período refratário longo (benigno).
3) mantenimento do padrão de pré-excitação pré-esforço.
4) indução a surtos de taquiarritmias: TPSV ortrodómica, antidrómica ou FA.

Resumindo o método:
1) É de baixa sensibilidade para provocar arritmias.
2) Eventualmente permite analisar o comportamento da via acessória durante o estresse físico e assim, pode mostrar macrorrentrada ou taquicardias atriais pré-excitadas indicativas de maior risco de morte súbita.
3) Pode ser útil para identificar pacientes com baixo risco de morte súbita: se desaparece a pré-excitação no pós-esforço.
4) A persistência da pré-excitação durante o esforço não indica necesariamente alto risco.

D) Ecocardiograma: permite diagnosticar se o WPW é isolado ou associado a cardiopatías que aumentem as chances de aparecimento: estenose mitral, cardiomiopatia hipertrófica, CIA, Ebstein, etc. Nestes casos, estará indicado o estudo eletrofisiológico invasivo com o intuito de determinar a medida do menor intervalo RR pré-excitado o qual, se menor do que 250ms. indica via acessória com período refratário curto e com maior risco de morte súbita.
Nestes caso, a conduta será ablação por radiofrequência. La muerte súbita en el sindrome de Woff-Parkinson White (WPW) es un hecho raro y catastrófico siendo mas raro todavia recuperarlos de este evento. La conducta de elección en estos casos es la ablación por catéter com energia de radiofrecuencia. Jamás debemos intentar usar fármacos recuperados de muerte súbita. La estratificación del riesgo se realiza mediante la determinación de la posibilidad de desarrollar fibrilación auricular (FA) y/o el estudio electrofisiológico. Si la medición del período refractário anterógrado de la via accesória durante este estudio es menor que 250ms el paciente corre serio riesgo de morir subitamente y esta indicado la ablación de la via anómala. Se consideran pacientes com tendencia desarrollar FA aquellos com via anómala de localización póstero-septal manifiesta, del sexo masculino y mayor cuanto mas edad tenga el paciente.

Andrés R. Pérez Riera

Hola Ricardo
Hermoso ECG!
Estos son difíciles de localizar, ya que la orientacioón es medioseptal o pósteroseptal. Si aceptamos que la imagen en V1 es más compatible con pseudo-LBBB; entonces la localizacion es **Derecha medio a posteroseptal** (DII positiva con DIII y aVF negativas); pero si alguien le adjudica a la primera porción del QRS un componente positivo (lo tiene) entonces la localización sería Izquierda póstero-septal.
Las maniobras dinámicas en el laboratorio son muy útiles:

1. **Differential atrial pacing**: permite distinguir anatómicamente la inserción de la vía
2. **Preexcitation Index**: se deduce el acoplamiento mínimo de una PVC que genere preexcitación de la aurícula, al ciclo de la taquicardia

Y por supuesto, ***análisis de la activación retrógrada durante marcapaseo ventricular y taquicardia, y adecuado mapeo.***

Un fuerte abrazo

Adrián Baranchuk

Quisiera llamar la atención en el siguiente detalle.
El primer complejo de V1 V2 y V3 es un latido de "fusión" entre dos derivaciones diferentes!. Es sólo un artefacto creado por la máquina de electro. Por lo tanto, no hay delta negativa intermitente en V1. (¿creo que Andres menciono esto?)

Dardo Ferrara

Hola amigos,
empezaría por el lado derecho, y coincido con medio o pósteroseptal, ni tan medial ni tan posterior, por ahí estará, a pesar de los conservadores, yo intentaría ablacionarla,

Francisco Femenia

Dear Adriancinho and friends:
We follow in this particular topic the concept of Dr. Beatrice Brembilla-Perrot et al from France.
She wrote: The indications of electrophysiological study (EPS) are now large in symptomatic patients to perform in a second time the catheter ablation of patients complaining frequent sustained tachycardias. The study should be performed by catheterization.
- In patients with syncope, but no documented tachycardia, electrophysiological study is necessary and might be performed by transesophageal route because the role of the accessory pathway in the occurrence of syncope remains rare in adults [1].
- In patients who have a documented rapid or syncopal AF, electrophysiological study is not indicated, because direct catheter ablation of the accessory pathway is recommended. The location of thebundle is easier in sinus rhythm and the induction of an AF should be avoided.
- In asymptomatic patients, the indications of EPS are more debatable [3]. At first if the study is indicated, esophageal route should be preferred, because the probability to find a form at potential risk of sudden death remains rare (10 %). The main interest is to allow the patients in 90 % of cases to continue their activities in presence of an electrophysiological form without signs of risk of rapid atrial arrhythmias
Some indications of a systematic electrophysiological are actually recommended:

1) Most of sudden deaths (SDs) have the peculiarity to occur during exercise [4]. Because of the important development of sports from the infancy to the elderly, it is important to detect those patients with WPW at risk of SD who practice a sportive activity; the indication generally, begins after 10 years, because the risk of induction of a rapid AF is very small and the level of sport still low. In adults only those who practice a sport at a high level (for example bicycle) are studied. The competitive athlete should be studied in all ranges of age. The indications are also recommended in professions with a high level of sportive activity (policemen, soldier, fireman…)
2) The second indication is the detection of a WPW syndrome in a patient with high responsibility profession such as professional pilot (plane, truck, bus, train)
While these indications are largely in teenagers and adults less than 40 years of age, the indications in children or elderly are more controversial :
- In children, the conduction in accessory pathway and normal AV conduction system are more rapid, probably without a clinical significance: in the study of Bromberg a cycle length < 220 ms in basal state is considered at risk of severe arrhythmias in children < 18 years. In adults, the value of <250 ms is taken as a sign of a dangerous form. Moreover, the increase in conduction velocity in accessory pathways was reported in children and the disappearance of the Wolff-Parkinson-White syndrome can be expected, but this is inconstant and not predictible. Therefore, because some SDs as the first event were reported in children the indications should be liberal in children who are competitive athletes and in all children above the age of 10 years.
- In elderly, the shortest atrial pacing cycle length with 1:1 anterograde conduction via the bypass tract increased progressively with age [6;8]. However, the propensity for AF was shown to be higher in older patients compared to younger patients [9]. While the exact mechanism is uncertain, degenerative changes associated is the most commonly proposed mechanism and the dispersion of atrial refractoriness increases progressively with age [9].The risk to have a severe arrhythmia as the first manifestation of WPW syndrome in an old patient was previously reported [10]. High level sportive activity is rare in elderly, but other causes for adrenergic tone increase might be encountered: for example, an important surgery was the cause of the development of a VF in a 72 year old asymptomatic patient.
Therefore, because of the increase of the sport in all ranges of age and particularly in young children or after 60 years, the risk of occurrence of a potentially severe arrhythmia in an asymptomatic WPW patient should be not underestimated. The reliability and the simplicity of transesophageal study in WPW permits easy detection of forms at risk of severe arrhythmia.
In conclusion, EPS is the best means to define the prognosis of a patient with the WPW syndrome. The study is easily performed by the transesophageal route. The indications should be large to avoid the misdiagnosis of a form at risk of rapid arrhythmias. This dangerous form is relatively rare in asymptomatic patients or symptomatic patients with unexplained syncope. Most of these patients (>85%) would be allowed to continue their activities, without specific treatment, because they have a benign form of WPW syndrome. In remaining patients, the development of the curative treatment of this disease by radiofrequency application on the accessory pathway [10] permits to offer the possibility to this patient to continue the sport or some professions with stress or exercise. However, if the data of EPS are clear and admitted in all studies, their consequences are still debatable: radiofrequency current ablation of asymptomatic patients with the WPW syndrome is controversial and requires other studies with randomized series comparing untreated patients and patients treated by radiofrequency ablation of the accessory pathway.

References

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Andrés R. Pérez Riera

El caso me parece también más un medio septal derecho, si el paciente nunca ha tenido episodios de taquicardia, síncope o cualquier sintomatología relacionada con taquicardia yo le hago cuando mucho una ESTIMULACION ESOFAGICA, aunque se que existe mucha controvesria, nuestro servicio aún realiza cardioestimulación esofágica frecuentemente en casos seleccionados y este tipo de caso es ideal conforme numerosos estudios publicados por la Dra B. Perrot como bien lo cita el Dr Pérez Riera.

Carlos Rodríguez Artuza
